

In the United States Court of Federal Claims

No. 16-845 C

Filed: October 3, 2018

WALSH CONSTRUCTION CO., <i>et al.</i> ,	*	28 U.S.C. § 1491 (Tucker Act
	*	Jurisdiction);
Plaintiffs,	*	41 U.S.C. §§ 7101-7109 (Contracts
	*	Dispute Act);
v.	*	48 C.F.R. §§ 52.233-1 (Federal
	*	Acquisition Regulation, Disputes),
THE UNITED STATES,	*	52.236-2 (Federal Acquisition
	*	Regulation, Differing Site
Defendant.	*	Conditions);
	*	Good Faith And Fair Dealing.

Richard David Kalson, Benesch Friedlander, Coplan & Aronoff LLP, Counsel for Plaintiffs.

Igor Helman, United States Department of Justice, Civil Division, Washington, D.C., Counsel for the Government.

MEMORANDUM OPINION AND FINAL ORDER

BRADEN, *Senior Judge*.

To facilitate review of this Memoranda Opinion And Final Order regarding the duty of good faith and fair dealing and differing site condition allegations set forth in a February 13, 2017 Amended Complaint, the court has provided the following outline.

I. FACTUAL BACKGROUND.

- A. On November 23, 2011, The United States Army Corps Of Engineers Issued Solicitation No. W912DR-12-R-0001 To Request Proposals For A Firm, Fixed-Price Contract To Build A Defense Logistics Agency Facility In New Cumberland, Pennsylvania.
- B. On August 17, 2012, The United States Army Corps Of Engineers Awarded Contract No. W912DR-12-C-0011 To Walsh Construction Company.
- C. In January 2013, Walsh Construction Company Conducted Rock Coring To Enable The Army Corps To Set Preliminary Tip Elevations.
- D. In February 2013, Richard Goettle, Inc. Began Drilling Shafts, But Experienced Significant Problems.
 1. Caving And Water Problems Occurred At “Five Problem Shafts.”
 2. Approximately Ninety Other Drilled Piers Failed Inspection.

- E. On November 30, 2015, Walsh Construction Company Submitted A Request For Equitable Adjustment To The United States Army Corps Of Engineers, On Behalf Of Richard Goettle, Inc.
- F. On April 18, 2016, The Contracting Officer Issued A Final Decision Denying Walsh Construction Company's November 30, 2015 Request For Equitable Adjustment.

II. PROCEDURAL HISTORY.

III. DISCUSSION.

- A. Subject Matter Jurisdiction.
- B. Standing.
- C. Whether Plaintiffs Met Their Burden Of Proof, At Trial, To Establish The Allegations In The February 13, 2017 Amended Complaint.
 - 1. Whether The Government Violated The Duty Of Good Faith And Fair Dealing, Thereby Breaching The Contract (Counts One and Two).
 - 2. Whether Plaintiffs Are Entitled To Recover Costs For A Differing Site Condition At The Defense Logistics Agency Headquarters Site (Count Three).

IV. CONCLUSION.

I. FACTUAL BACKGROUND.¹

- A. **On November 23, 2011, The United States Army Corps Of Engineers Issued Solicitation No. W912DR-12-R-0001 To Request Proposals For A Firm, Fixed-Price Contract To Build A Defense Logistics Agency Facility In New Cumberland, Pennsylvania.**

On November 23, 2011, the United States Army Corps of Engineers (the "Army Corps") issued Request for Proposals No. W912DR-12-R-0001 (the "Solicitation") for offers to construct a Defense Logistics Agency (the "DLA") facility at the Defense Distribution Depot Susquehanna, Pennsylvania (the "DDSP"), a large military facility in New Cumberland, Pennsylvania (the "Project"). DX 124 at 2. The Project site was located on the northern portion of the DDSP, close to the Susquehanna River shoreline. JX 51 at 1.

¹ The facts discussed herein are derived from evidence adduced at a trial held on March 19–20, 22, and April 4, 2018, in Washington, D.C. (TR 1–1143), together with the parties' Joint Stipulations of Fact (Jt. Stip. ¶¶ 1–21). The witnesses for each party are identified in Court Exhibit A. At trial, the court admitted into evidence: Plaintiffs' Exhibits (PX 1–275); Government's Exhibits (DX 1-178); Government's demonstratives (DDX 1–3); and 70 Joint Exhibits (JX 1–70). See TR 8, 9, 76, 104, 274, 829–30.

On December 12, 2011, the Army Corps prepared a Final Geotechnical Report for the Project site that was included as an amendment to the Solicitation, showing a fault line that runs through the DDSP. JX 51 at 4–5. The subsurface on one side of the fault line was comprised of siltstone or claystone; the subsurface on the other side, *i.e.*, where the Project site was located, was comprised of “Epler Formation limestone² that] forms a subsurface karst terrain that is typical of the soluble carbonate rock response to weathering and erosion.” JX 51 at 5; TR 677–78 (Tucker) (“But here we have a fault line that runs through New Cumberland, and what that does is basically separates two geologies. You have the one thrust plate, where our project is, which has the limestone, and then the southern part, where – the other portion of the project does not have limestone.”); TR 780 (Garrett) (“[T]his one was limestone, and that rock is claystone/siltstone, a different type of geology.”). The Final Geotechnical Report described the limestone as “a light gray, hard, massive . . . bedrock,” that was “typically slightly weathered, highly to moderately fractured, and very hard[.]” as well as “pinnacled.”³ JX 51 at 5-6.

The Final Geotechnical Report also reflected that “[c]oncrete drilled piers⁴ extending into the Epler limestone are required for support of the column loads of the [DLA] building.” JX 51 at 15. Therefore, the Solicitation, as amended, required the contractor to “install special deep foundations” for drilled piers ranging from thirty to seventy-two inches in diameter. DX 124 at 6–9, 13. The drilled piers support the building solely by side-shear resistance⁵ at the rock socket,⁶

² “Epler limestone,” or “karst limestone,” is a type of rock composed of “calcium carbonate,” that upon reacting with water “creates pinnacles and voids and things like that [within the rock].” TR 674 (Tucker).

³ “Pinnacled” describes a rock surface of varying elevations, *i.e.*, one that is “up and down all over the place.” TR 682 (Tucker); *see also* TR 778 (Garrett) (“[B]ecause this is this pinnacled, kind of unpredictable rock formation, I would not have extrapolated directly between borings[.]”).

⁴ Drilled piers are a type of deep foundation system where concrete cylinders of varying diameters are constructed by “excavating a hole, typically 3 to 12 feet in diameter, inspecting the soil or rock in to which the foundation is formed, and constructing a cast-in-place reinforced concrete foundation within the hole.” DX 111 at 1–3.

⁵ Side-shear resistance results when concrete is poured into the drilled shafts, and a section at the bottom of the concrete adheres to the sides of the rock surrounding the shaft, as the concrete is poured. *See* TR 681 (Tucker) (defining “shear” as “the bond between the concrete and the rock. . . . The she[a]r is in the sides.”). Side-shear resistance differs from base resistance, where the base of the drilled pier bears the load. DX 111 at 1–3; *see also* TR 681 (Tucker) (affirming that “the weight is being held by the sides of the rock rather than just resting on the bottom”).

⁶ A rock socket is a section of the drilled pier adhering to the surrounding rock that bears the building load. *See* TR 681 (Tucker).

that must be set in “competent rock.”⁷ TR 680–81 (Tucker) (“[T]he foundation is constructed then where the concrete and the rock are tight together, in she[a]r, and that basically supports the structure in the rock socket.”); *see also* TR 275 (Eckert) (“The rock socket is the portion of the drilled shaft that is founded in competent rock that will support the design load of the building or column at that location.”).

In addition, prior rock corings that were taken across the Project site were provided with the Final Geotechnical Report. JX 51 at 21–84; *see also* TR 683 (Naughton) (testifying that twenty-one rock cores “encompassed the whole site, but [were not located at] every drilled pier [location.] . . . The exact locations . . . were just spread throughout the site, just to get a general idea of what would be encountered out there.”). These rock cores showed that “voids”⁸ were encountered in approximately half of the borings. JX 51 at 6 (“Half of the Phase I 2009 exploration borings, and three of the seven Phase II 2011 borings, showed pitting, voids, or other solution weathering.”). Because of these voids, the Final Geotechnical Report emphasized that “[o]bservation of all foundation subgrades by a qualified geotechnical engineer or geologist will be required during construction. Where voids or cavities are encountered, additional excavation or grouting will be required as determined in the field.” JX 51 at 6; *see also* TR 687 (Naughton) (“[O]nce the drilled pier is constructed down to what we believe is going to be the rock socket, based upon that small diameter [from the rock core], we’ll send a geologist or a geotechnical engineer who needs to go down and make sure there [are] no voids or large seams in that area[,] just because . . . that’s such a small diameter, that doesn’t really encompass the whole diameter of the drilled pier.”). And, “[c]asing of the hole throughout the full depth of soil, decomposed rock, and voids will be required to prevent caving of the sides of the excavation, to prevent significant infiltration of groundwater[,] and to provide safe conditions for inspection.” JX 51 at 18.

In addition, the Final Geotechnical Report noted that, “[w]ith the exception of drill hole B-1,⁹ groundwater was not encountered in the borings above the top of rock.” JX 51 at 6. But, the Final Geotechnical Report warned that the “karstic nature of the regional geology makes it difficult to predict local groundwater conditions. The occurrence of solution cavities, clay seams, and fractures will impact local groundwater levels and flow behavior.”¹⁰ JX 51 at 6–7; *see also*

⁷ “Competent rock” is rock that “meets the strength assumptions used in the design of the piers and that is free of voids or seams of decomposed rock or clay to a depth of a[t] least two pier diameters below the bottom of the pier bearing elevation.” JX 51 at 15–16.

⁸ Voids “occur as a result of solution weathering” and “pose a risk of settlement or collapse of foundations if undetected and the foundations are placed upon the void.” JX 51 at 6. Solution weathering indicates that rock has “been subjected to more water than, say, less water, so it would be more weathered than not.” TR 676 (Tucker).

⁹ “B-1” refers to one of the borings at the Project site. There were twenty-one borings, labeled B-1 through B-21. TR 686 (Tucker).

¹⁰ At trial, Mr. David Tucker, an Army Corps Geotechnical Engineer, described the process causing this karstic nature—the solution “weathering” process—as follows:

TR 689 (Tucker) (discussing groundwater section of Final Geotechnical Report and explaining: “[i]t’s because you have these clay seams and you have the voids, and when . . . the water comes down and hits the rock, the water, it’s going to flow all through the seams and folds of that rock, so it’s very unpredictable with all those voids . . . when you are going to hit groundwater and when you are not going to hit it.”). Therefore, the Final Geotechnical Report cautioned that, “[w]here high groundwater inflow is experienced and difficulty is anticipated in concreting in the dry, concrete placement by pumping or tremie¹¹ with discharge to the base of the shaft will be required.” JX 51 at 18.

The Final Geotechnical Report also included estimated tip elevations, *i.e.*, the depth to which the shafts would be drilled, and excavation quantities for each diameter of drilled pier. JX 51 at 16.¹²

Q. GOVERNMENT COUNSEL: But you said it has voids?

A. MR. TUCKER: So it has voids. So what happens is[,] because it reacts with the water, which is acidic, you know, with carbon dioxide, reacts with the water - -

THE COURT: Rainwater?

A. MR. TUCKER: Rainwater, and it gets down into the ground, also groundwater, so you can get pinnacles underneath . . . the ground that look like this (indicating). Water will also go down - - find ways down through seams, joints, and folds, and what happens is the water solutions with the limestone, and you get voids, cavities. Like if you’ve ever been to Luray Caverns, the big caverns, that’s the kind of stuff that you get with this limestone. Now, this takes millions of years. It doesn’t happen overnight obviously.

Q. GOVERNMENT COUNSEL: You said it solutions. Can you - - does that mean the water is reacting with the limestone?

A. MR. TUCKER: It is. I mean, you can think in your mind like an Alka-Seltzer in water. You will get that - - that reacts, and then the nonsoluble material will kind of be - - will lay there as residual soil, so you will get clay that will sit in the seams of the limestone.

TR 675 (Tucker).

¹¹ A tremie “is a pipe through which concrete is placed below water level. . . . [where t]he lower end of the pipe is immersed in fresh concrete so that the rising concrete from the bottom displaces the water without washing out the cement.” Gov’t Post-Tr. Br. at 15 n.6 (citing JX 49 at 13; DX 111 at 4-12 to 4-14).

¹² At trial, Ms. Garrett, the Government’s Geologist, while viewing the Final Geotechnical Report on a screen, testified:

But, the Final Geotechnical Report clarified that the estimated tip elevations were not final, and the Army Corps would provide more precise elevations after the Contract was awarded. JX 51 at 16 (“Preliminary drilled pier quantity estimates are provided in the following table by pier diameter. Due to the pinnacle nature of the Epler limestone, these quantities *shall be considered preliminary* and will be better defined once the rock cores are completed at each drilled pier location.”) (emphasis added); *see also* TR 684 (Naughton) (“[B]ecause of the pinnacled nature of the limestone, with all the voids and the cavities I was discussing, the depth of rock socket can’t be determined exactly unless you drill at each location.”).

The Solicitation, as amended, contained requirements specific to the drilled pier construction (“the Drilled Pier Specification”). JX 49. Bedrock was described in the Drilled Pier Specification, as:

typically slightly weathered, highly to moderately fractured, and very hard. The bedrock surface is pinnacled and has solution features that are both air filled and filled with clay. These features are common in karst terrain. Open cavities in the bedrock are common. Clay seams were also encountered in the bedrock.

JX 49 at 7.

Therefore, the Drilled Pier Specification required that the contractor use protective steel casings to “adequately and securely protect [the rock socket] against cave-ins, displacement, and from seepage of groundwater or storm water[.]” JX 49 at 11. The Drilled Pier Specification also required that the proper sequence for excavation “of caissons¹³ or groups of caissons [] be performed so that reinforcing steel and concrete placement is a continuous operation performed the same day that the excavation is completed.” JX 49 at 7. But, if the contractor could not complete excavation the same day, it was to clean and inspect the rock socket immediately prior to concrete placement. JX 49 at 7. The Drilled Pier Specification further required that “[e]ach drilled pier excavation shall be checked by the [c]ontractor for its depth, water removal, cleanup, workmanship, and for all tolerance requirements before any concrete is placed.” JX 49 at 7.

And, the Drilled Pier Specification required the contractor to provide a third-party licensed professional engineer with geotechnical engineering expertise (the “Geotechnical Engineer”) to conduct “drilled pier inspection and oversee the recording and monitoring of all pier construction.”

A. MS. GARRETT: So I would have lumped sets of piers around different borings and assigned the properties of that boring to all those piers for me to develop initial quantities.

Q. GOVERNMENT COUNSEL: And were those quantities . . . included in the [Final] [G]eotechnical [R]eport?

A. MS. GARRETT: Yes. They were in the table that’s on the screen.

TR 778 (Garrett).

¹³ A caisson is another name for a drilled shaft. *See* TR 20 (Naughton).

JX 49 at 7–8. The Geotechnical Engineer was required to check each drilled pier excavation to “ensure that it meets the requirements” in the Drilled Pier Specification. JX 49 at 8. The contractor also was advised that the Contracting Officer (“CO”) “may inspect each drilled pier excavation[:] (1) at the time of drilling, to inspect the rock in the pier base and rock socket for acceptability; and (2) prior to the placement of concrete, to make sure the hole is in the proper condition for concreting.” JX 49 at 8.

The Drilled Pier Specification described the nature of rock where rock sockets could be located, *i.e.*, rock that was “hard, in-place, slightly weathered limestone having sufficient bearing strength as approved by the [CO].” JX 49 at 12. In addition, “[o]pen joints, open fractures, clay seams, or cavities will not be permitted, but soft weathered zones or shale beds not exceeding 4 inches in length are permissible if their total area does not exceed 20% of the area of the drilled pier base.” JX 49 at 12. The Drilled Pier Specification imposed similar requirements for the drilled pier shafts, except that the rock could not have “mud stains, open joints, open fractures, clay seams, or cavities that exceed[ed] 2 inches in width in the walls of the socket,” without the CO’s approval. JX 49 at 12. Likewise, the Drilled Pier Specification directed that rock coring be conducted “at each drilled pier location for the purpose of evaluating the bedrock quality and establishing design bearing grades for the rock sockets.” JX 49 at 19. Upon completion, the CO and Geotechnical Engineer would provide “required pier Top Of Rock Socket [(“TORS”)]¹⁴ elevations based upon observation of the related samples and boring logs.” JX 49 at 19.

Nor could the contractor place concrete “until the excavation was inspected by the Geotechnical Engineer and approved by the [CO].” JX 49 at 15. Instead, concrete must be placed “in a dry hole by pumping, or by dropping concrete through a funnel having a 5 foot long ‘elephant trunk’ pipe to direct the concrete to drop straight down[,], without hitting the sides of the excavation or the reinforcement before striking the bottom.” JX 49 at 15. In addition, “[i]f water is standing in the bottom of a drilled pier, the water shall be pumped out of the drilled pier to allow inspection of the bottom of the drilled pier by the [CO].” JX 49 at 13. But, if it was “impossible to dewater” the shaft, the contractor could request the CO’s approval to complete the hole “in the wet,” using a “tremie or pumping technique[.]” because “[p]lacing concrete or finishing the hole in the wet would prevent . . . entering the hole to clean it, so the shaft excavation or the bottom would have to be mechanically cleaned using the drill rig and a cleanout bucket[.]” TR 386 (Eckert); JX 49 at 11, 13, 15. Finally, after water stabilized in the wet hole and the hole was mechanically cleaned, the contractor was required to “sound the bottom of [the hole] to make sure that there [was] no more loose debris, and then place the concrete using tremie methods in the wet, underwater.” TR 386 (Eckert).

¹⁴ A TORS is “the elevation at which suitable rock was found that met the specifications[.]” it is the depth at which the rock socket begins. TR 274 (Eckert).

On December 6, 2011, the Army Corps conducted a site visit to allow interested bidders to inspect the Project site selected. Jt. Stip. ¶ 2. Representatives from Walsh Construction Company (“Walsh”) attended. DX 126 at 3. Thereafter, Walsh requested quotations from several deep foundation contractors, including Richard Goettle, Inc. (“Goettle”). DX 92; DX 100; DX 101; DX 104; DX 105. On January 18, 2012, Goettle submitted an initial quote to Walsh. DX 94; JX 3 (Goettle initial quote).

On January 19, 2012, Walsh submitted an initial Proposal to the Army Corps. JX 55.

On July 10, 2012, after concluding discussions with the Army Corps, Walsh submitted a Final Proposal Revision (“Walsh’s Final Proposal”) to the Army Corps. JX 56.¹⁵ The technical component of Walsh’s Final Proposal anticipated that the “deep foundation schedule include[] multiple drilled pier operations safely working concurrently” and that Walsh would “[e]xpedit[e] the deep foundations [to] allow[] follow-on structural activities to commence earlier.” JX 55 at 10. The technical portion also stated that, “[d]rilled pier activities are on the [P]roject’s critical path. In the event additional drilled pier quantities are required due to existing subsurface conditions, delays could be experienced.” JX 55 at 15. To mitigate this risk, Walsh’s Final Proposal “include[d] mobilization of multiple drilled pier crews[,] if required to recover time lost due to added pier quantities.” JX 55 at 15. Walsh’s Final Proposal also discussed “the availability of additional manpower, equipment, material resources, and drilled pier subcontractors considered for this project.” JX 55 at 15. In addition, Walsh’s Final Proposal advised that “properly managing” the drilled pier work was “critical to schedule adherence[,]” in light of the “amount of drilled piers required for this [P]roject and the inspection process required for each one.” JX 55 at 15. In sum, Walsh’s approach to scheduling pier construction was explained, as follows: “[o]nce drilling begins, we are prepared to encounter unknowns such as rock and air pockets and have planned our schedule accordingly. We plan to utilize three crawler mounted drill rigs and perform specialized testing and inspections throughout the . . . process.” JX 55 at 31.

The Drilled Pier Specification stated that payment would be made “on the basis of total linear feet of concrete pier actually placed between the top and bottom drilled pier elevations,” rounded to the nearest foot. JX 49 at 2. In addition, the

[C]ontract unit prices for the pier construction shall constitute full compensation for furnishing all plant, labor, equipment, materials, and supplies, including surveys, dewatering, temporary protective steel casings, evaluation of completed piers, concrete reinforcing and concrete complete in place, and for performing all operations required for the completion of all work included under that item as specified herein.

JX 49 at 2.

¹⁵ Walsh’s Final Proposal included pricing forms and a bid guaranty and contract bond; it did not include any revisions to Walsh’s technical component or past performance proposals. *Compare* JX 55 (complete proposal), *with* JX 56 (containing only pricing forms and bid guaranty and contract bond).

Similarly, earth excavation, rock excavation, and temporary steel casings to be left in place would be paid, based on linear feet actually excavated or left in place. JX 49 at 2–3. Pre-construction rock coring, rock probe holes, and post-drilled pier construction drilled pier coring also would be paid on the same basis. JX 49 at 3–4. This payment structure was reflected in the separate contract line items (“CLINs”) included in Section B of the Solicitation. DX 124 at 5–10.

Walsh did not consult with a professional geotechnical engineer about the Project prior to submitting its Final Proposal. Jt. Stip. ¶ 6. But, Walsh received and reviewed the Final Geotechnical Report prior to submitting its Final Proposal to the Army Corps. TR 48 (Naughton), 183 (Pagone).

B. On August 17, 2012, The United States Army Corps Of Engineers Awarded Contract No. W912DR-12-C-0011 To Walsh Construction Company.

On August 17, 2012, the Army Corps awarded Contract No. W912DR-12-C-0011 (the “Contract”) to Walsh. JX 54 at 2. On August 29, 2012, the Army Corps issued a Notice to Proceed, that was acknowledged by Walsh on the following day. JX 2.

Thereafter, Walsh requested updated proposals from firms interested in performing work as subcontractors on the Project. JX 3 (9/12/12 Goettle email stating “Walsh was awarded the project and is subbing the shaft work out. They want to award by the end of this week, and have asked for our best and final number.”); PX 79 (subcontractor comparison chart); TR 19–20 (Naughton) (testifying that he prepared PX 79 “after working with the subcontractors who were bidding on the scope of work to solicit - - to be awarded a subcontract from us. This is a summary of those efforts to my superiors . . . recommending basically a status of the different subcontract bids and . . . the suggested award amount and who the suggested subcontractor would be.”). Walsh provided the Solicitation and related documents to all firms interested in performing as a subcontractor. TR 48 (Naughton). The updated proposals were to be based on the estimated excavation quantities provided by the Army Corps in the Final Geotechnical Report. JX 51 at 2–3.

On September 25, 2012, Goettle provided an updated proposal to Walsh representing that the proposed price included “one mobilization for the installation of the caissons utilizing two – three production drills.” JX 5 at 3. Goettle’s proposal assumed that the Army Corps would inspect each of the 272 contemplated drilled shafts. TR 251 (Dillon). The proposal, however, did not take into account additional time and cost if a drilled shaft failed inspection. TR 363 (Eckert) (“[W]e never expected to have to drill a shaft deeper, and we had to maintain production on the project, so we couldn’t have that drill sit there for two or more hours waiting on an inspection when we had no reason to believe that it would fail inspection and we would have to drill any deeper.”). Goettle did not consult with a professional geologist prior to providing a quote to Walsh. Jt. Stip. ¶ 4. But, Goettle had worked previously on another project at the DLA installation (“the BRAC Warehouse Project”) in 2009.¹⁶ TR 149 (Pagone).

¹⁶ The BRAC Warehouse Project was located on the other side of the fault-line than the Project. TR 780 (Garrett).

On November 26, 2012, Walsh entered into a subcontract with Ammero Construction Services, LLC (“Ammero”) to install 272 drilled piers. PX 99 (11/26/12 Ammero Subcontract). On December 4, 2012, Ammero subcontracted that work to Richard Goettle, Inc. (“Goettle”).¹⁷ Jt. Stip. ¶ 1; JX 61 (12/4/12 Goettle Subcontract). The Ammero subcontract provided that Goettle would

furnish all labor, tools, materials, equipment, insurance, taxes, freight[,] and supervision as required necessary to fully fabricate, deliver F.O.B. Project and install all Drilled Piers [and] Rock Anchors as more completely described in the exhibits attached hereto, in strict compliance with the plans and specifications and as directed by [Walsh,] . . . and to fully perform associated work and comply with the terms and conditions as more completely described in the contract between Ammero . . . and Walsh[.]

JX 61 at 1.

On January 16, 2013, before construction began, the Army Corps convened a preliminary meeting that Walsh, Goettle, and a third-party inspector attended. JX 50 (1/16/13 meeting minutes); TR 253 (Dillon).

C. In January 2013, Walsh Construction Company Conducted Rock Coring To Enable The Army Corps To Set Preliminary Tip Elevations.

As required by the Contract, Walsh was to perform rock coring at 272 drilled pier locations. Jt. Stip. ¶ 7; JX 51 at 16. Before the Army Corps set the preliminary TORS elevations, the Army Corps reviewed the rock core logs prepared for each of the 272 pier locations, photographs of the rock cores, and the driller’s log that was prepared contemporaneously with the rock coring. TR 771–72, 789–90 (Garrett). The Army Corps used this information to establish the TORS elevations. TR 772 (Garrett); *see also* DX 156 (spreadsheet aggregating information).¹⁸

¹⁷ Ammero did not have experience in drilled-pier construction, but Walsh retained that firm as a subcontractor to satisfy certain small business and women-owned small business subcontracting requirements under the Contract. TR at 109 (Pagone) (“Walsh had asked us if we would possibly be able to work through a company named Ammero Construction to satisfy contractual -- . . . I don’t remember the disadvantaged business opportunity, but if we would work through them, and we did.”). Although Ammero subsequently subcontracted the drilling requirements to Goettle, Ammero retained responsibility for “collecting the certified payroll, handling the waivers, the payment application process, basically a lot of the administrative functions of the scope of work.” TR at 23 (Naughton).

¹⁸ The final design tip elevations did not have to be complete before Goettle began drilling, and some tip elevations were provided in phases, beginning with April 3, 2013. JX 52 at 2.

Determining TORS elevation is an iterative process. TR 775 (Garrett) (“So in that ‘Comments’ section, that was kind of a place where if we were changing the [rock] socket depth or elevation from what the field inspector had initially set, sometimes we would write a comment there, and sometimes it’s kind of dialogue between the reviewer and the checker to explain why we made a decision that we did.”). In some cases, the Army Corps decided to raise the TORS elevation. TR 775–76 (Garrett) (“So in this case, Cheryl Webster was the reviewer of this one, so she’s saying that she actually raised the top of socket to 18 1/2 [feet], because it had very good recovery shown in the logs and in the box, but I had looked at it after her as the checker and decided that there was a vuggy area[, *i.e.*, an area with] . . . very, very small cavities, so it’s an indication of some weathering. . . . So I was saying that we should not raise it as high as she had[,] but - - still raise it some[.]”). In other locations, such as pier L-4,¹⁹ the Army Corps decided that the TORS elevation must be lowered. TR 776–76 (Garrett).

Rock cores were used to set the tip elevations, but those elevations were subject to change, depending on conditions encountered during drilling. TR 758 (Garrett).²⁰

To illustrate the process used in setting tip elevations before and during excavation, the Government’s Geologist, Ms. Garrett, prepared a demonstrative that was used at trial. DDX 1.

¹⁹ Each of the 272 piers had a specific designation based upon a grid system. TR 772 (Garrett). L-4 is one of these designations. DX 156 at 7 (providing a complete list of the pier designations).

²⁰ At trial, Ms. Garrett, the Government’s Geologist, testified:

THE COURT: So what I’m taking from this is the borings are really not a reliable – they provide limited information.

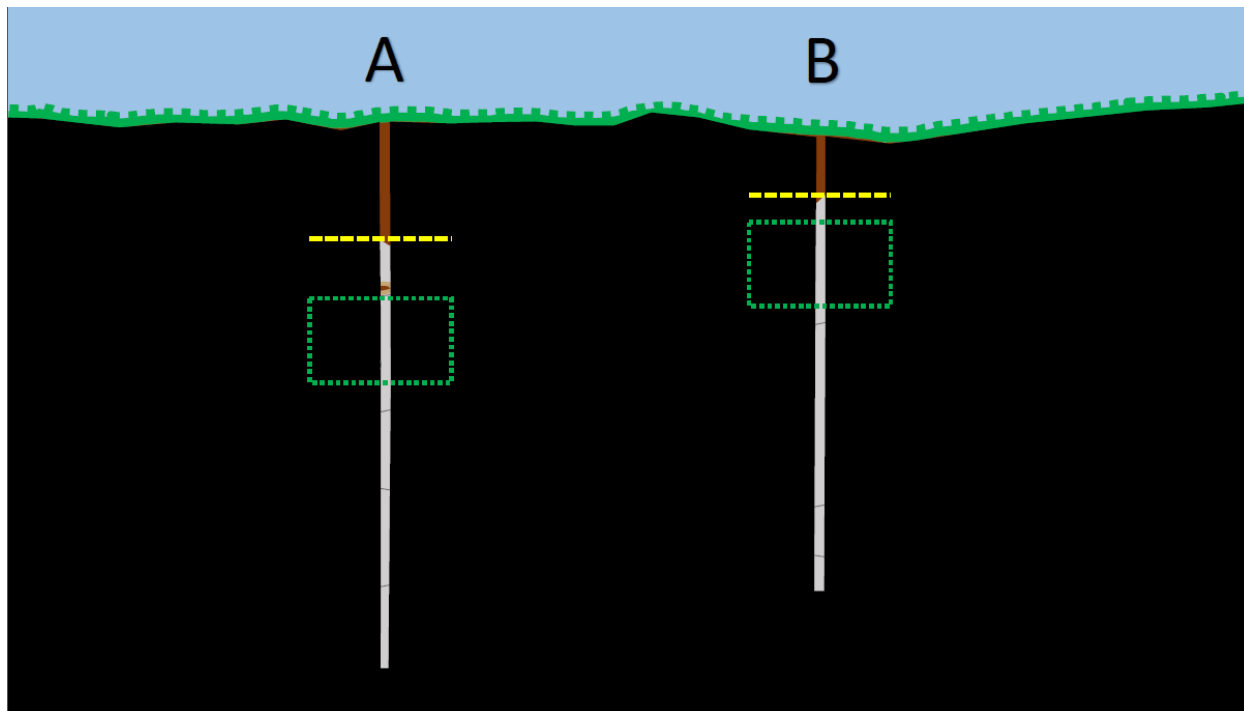
A. MS. GARRETT: They do provide limited information but it’s more than what we had without looking at all into the ground.

THE COURT: Well, that’s true, but it’s not necessarily dispositive of where the rock socket is going to go.

MS. GARRETT: Well, no, it’s our first glimpse of where a rock socket could potentially go.

TR 758 (Garrett).

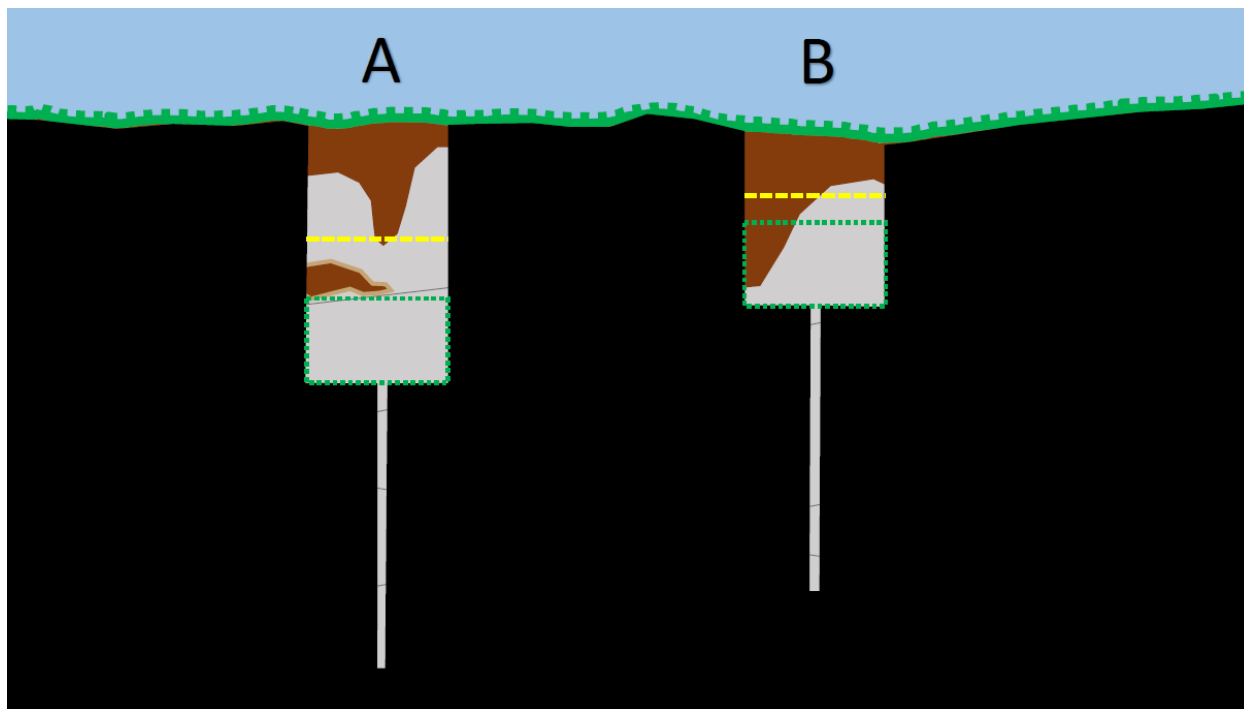
The following image shows rock cores, together with the preliminary rock socket delineated by dashed boxes:



DDX 1 at 3.

* * *

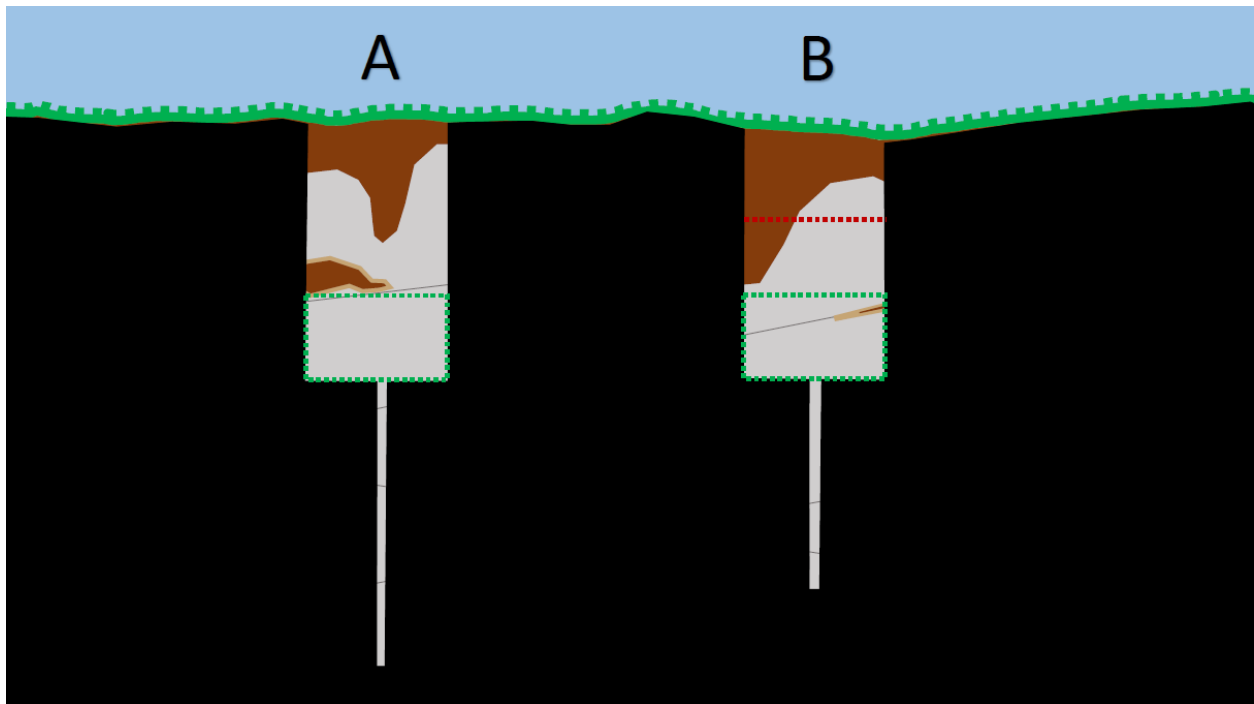
The following image illustrates how conditions encountered could vary from those indicated by the rock socket. Pier B in this illustration indicates that there was no competent rock. TR 760 (Garrett) (testifying that, “in this instance, we[] . . . would have had to lower the socket, but we wouldn’t lower it . . . an arbitrary amount. We would have lowered it just to the bottom of the unacceptable region, because we don’t want to unnecessarily lower the pier into unknown territory.”).



DDX 1 at 4.

* * *

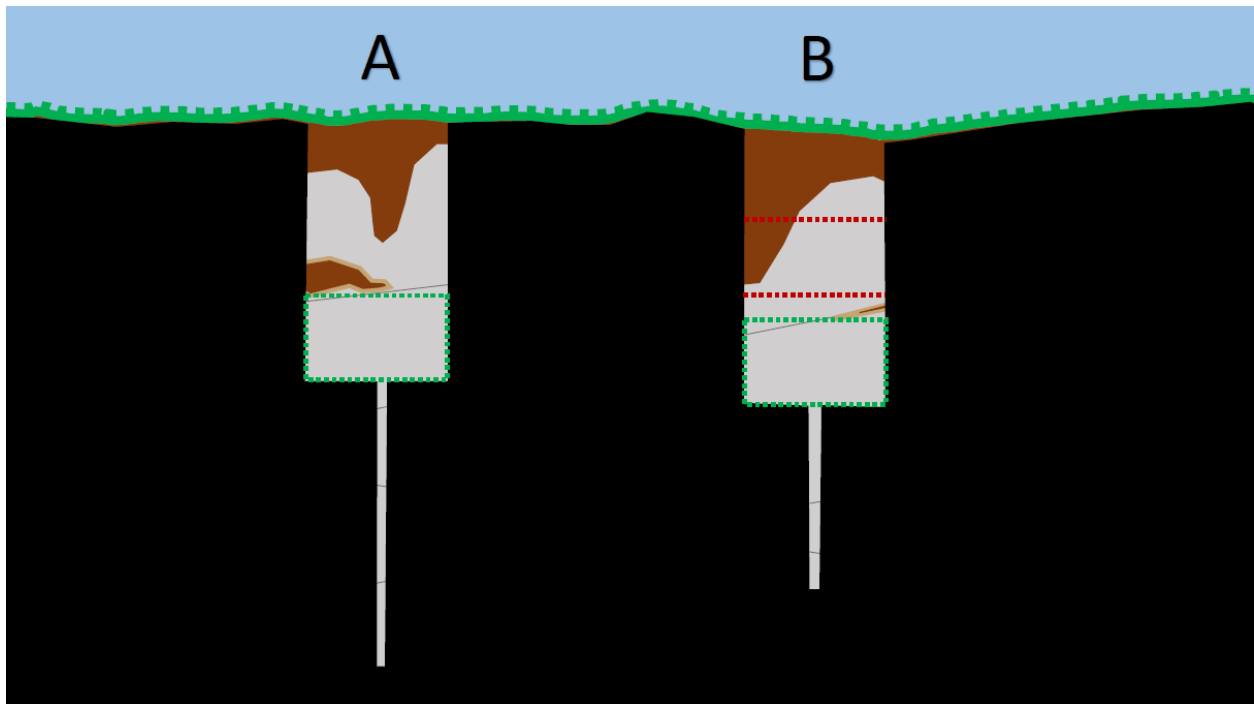
And as shown below, even revising the tip elevations for Pier B did not guarantee that the new rock socket would be placed in competent rock. In this situation, the Army Corps would revise the tip elevations. TR 759–60 (Garrett).



DDX 1 at 5.

* * *

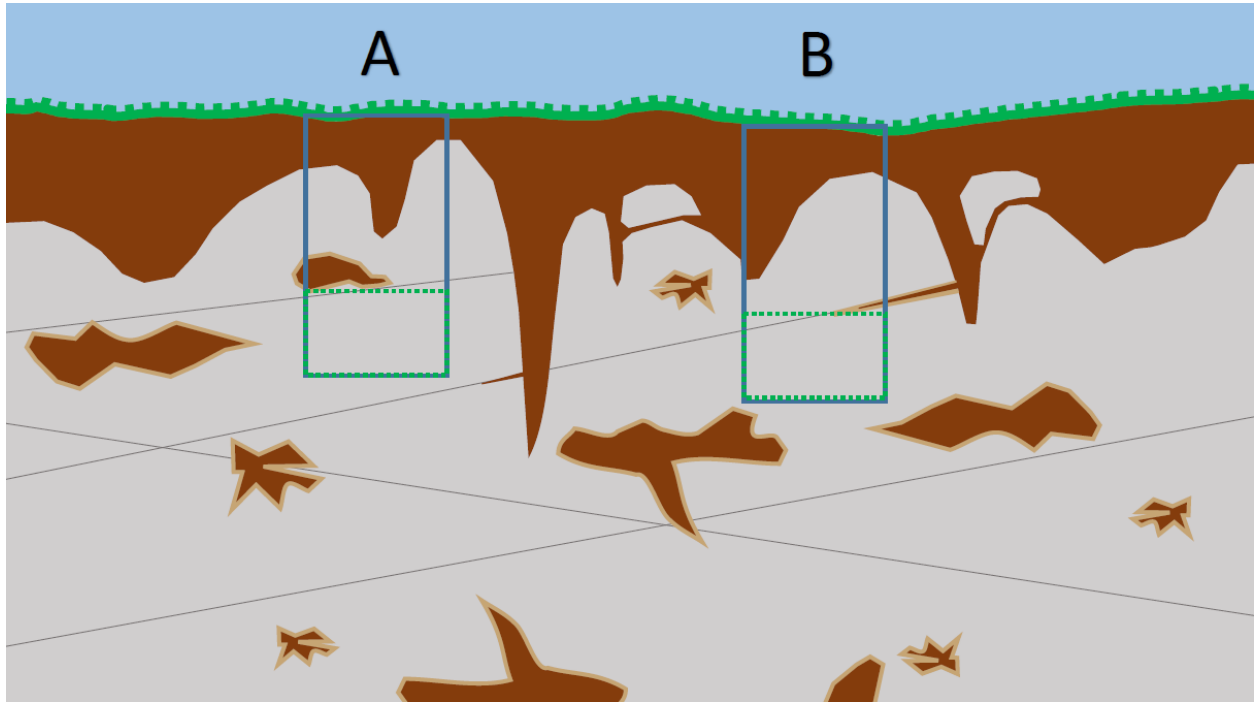
In this demonstrative, the third set of tip elevations resulted in a rock socket that was located in competent rock. TR 760. The following image shows the rock socket, after new elevations were established:



DDX 1 at 6.

* * *

The following image illustrates karst geology, and reflects that additional problems could be encountered by setting the revised tip elevations lower:



DDX 1 at 7.

As Ms. Garrett explained at trial, the Army Corps would not have revised the tip elevations only to lengthen the rock socket; instead, the rock socket length was a defined length designed to provide the requisite side-shear resistance. TR 821 (Garrett);²¹ *see also* TR 761 (Garrett) (“[T]o . . . give you an idea, if we had lowered pier B more to try to . . . get out of lowering a pier more than twice, we would have actually put ourselves in a worse position and opened up another void.”).

²¹ At trial, Ms. Garrett, the Government’s Geologist, testified:

I just want to make it clear, this is not a minimum rock socket length. It’s the designed rock socket length. So when we say we want a socket that’s 6 1/2 feet, we want a socket that’s 6 1/2 feet. We don’t want a seven-foot socket with imperfections in the middle. We want a 6 1/2-foot socket that meets the specifications for the rock socket rock.

TR 821 (Garrett).

D. In February 2013, Richard Goettle, Inc. Began Drilling Shafts, But Experienced Significant Problems.

1. Caving And Water Problems Occurred At “Five Problem Shafts.”

On February 13, 2013, Goettle began drilling, but experienced significant problems in drilling five of the shafts at the Project site, at pier locations N.8-4, L-3, L-2, L-4, and N.8-3. JX 40 at 49 (2/13/13 Eckert log book entry).

a. Drilled Pier N.8-4.

On February 14, 2013, Goettle drilled down to 40 feet on pier N.8-4, but encountered “fractured rock” and “caving,” so it had to fill the hole. JX 40 at 50 (2/14/13 Eckert log book entry); JX 65 at 2 (“[Shaft N.8.4] was advanced thr[ough] overburden soils and into weathered rock, when the shaft excavation began to collapse. At this point the shaft excavation was back-filled with concrete and lean-fill in an attempt to stabilize the shaft excavation and allow for further advancement.”). Efforts to stabilize the pier initially were unsuccessful. JX 65 at 2; PX 13 at 1 (“The shaft was advanced to a depth of +/- 42 [feet], . . . and approximately 9 [feet] into weathered rock, when the shaft excavation began to collapse. [After four days, the] shaft excavation was advanced to a depth of 55 [feet] thr[ough] weathered rock when it began to collapse again.”); TR 532 (Vinson) (testifying that the difficulty “was just [in] the beginning, just to get the elevations”). After Goettle was able to excavate to the TORS elevation, however, it encountered groundwater. PX 13 at 1 (Water formed after pier N.8-4 was drilled to 72 feet.).

On February 25, 2013, Goettle discovered a large vertical crevice in the rock socket of pier N.8-4. DX 54 at 61 (2/25/13 Eckert log book entry stating, “Pumped down [pier] N.8-4 for inspection. Vertical crevice plus or minus six feet high and deeper than arm’s length.”); *see also* TR 469 (Eckert) (“There were voids above the rock socket but the large crevice bringing in the water was in the rock socket.”).

On March 4, 2013, pier N.8-4 was de-watered to permit a probe hole to be drilled, but “[d]ue to continuous inflow of water, personnel could not enter the shaft to drill the probe from the bottom of the shaft using a hand air-rotary drill.” JX 66 at 7.

On March 14, 2013, Goettle personnel entered the shaft to clean it prior to inspection, but the continuing flow of water prevented cleaning. JX 66 at 7; *see also* DX 54 at 80 (3/14/13 Eckert log book entry stating: “Directed by COE [(Corps of Engineers)] to take [pier] N.8-4 deeper due to vertical crevice extending down into new socket +/- 4.5 [feet]. Directed to drill 4 [feet] deeper. Told Walsh we were not proceeding with [pier] N.8-4 until COE gives written directive [and] agrees to pay additional costs. COE Inspector went down hole to look [at] crevice.”). Next, Goettle “back-fill[ed] the rock socket with concrete in an attempt to seal the water and stop the inflow of sand[,]” and re-drilled the following day. JX 66 at 7. These efforts also were unsuccessful. TR 390 (Eckert) (“We let it set for several days to harden. We went back in and cored that concrete out, and, no, it didn’t work.”); DX 54 at 81 (3/15/13 Eckert log book entry stating: “Setting up to pour [pier] N.8-4. Cleaned out probe hole [and] sent CTI inspector [(third-

party inspector)] down to inspect probe. Excessive water coming in rock socket. Bringing a lot of sand. Can't get probe hole on bottom clean.”).

b. Drilled Pier L-3.

Goettle also encountered a “large crevice[] in the rock socket[]” of pier L-3. PX 161; DX 54 at 64 (2/28/13 Eckert log book entry stating: “Pulled [Bauer] BG 28 [drill] Off [pier] L-3. Large void [at] top. Filled w[ith] lean fill.”), 71 (3/5/13 entry stating: “Went down [pier] L-3 to clean [and] inspect. Found vertical crevice +/- 9.5 [feet] tall [and] very deep.”). In addition, water formed in pier L-3 during the inspection of the rock socket, so the Army Corps provided directions to stem the flow of water so the shaft could be cleaned before placing steel casing and concrete. PX 13 at 2.

On April 1, 2013, the shaft on pier L-3 was approved for concrete pouring, but the reinforcing steel cage “collapsed and was damaged beyond repair.” PX 13 at 2. A new cage was fabricated, but was not delivered until April 17, 2013. PX 13 at 2; DX 54 at 118.

c. Drilled Pier L-2.

Again, Goettle encountered similar problems on pier L-2. TR 397–98 (Eckert) (“We did manage to pump it down, but on this particular shaft, it says here in the note that that’s a three-foot diameter shaft, and the diameter of the pump was 2 1/2 feet in diameter. So in order for the inspector to go down, the pump had to be removed, and from the time we removed the pump and he got down, the hole had filled up with water.”); *see also* DX 54 at 72 (3/6/13 Eckert log book entry stating: “[Bauer] BG 28 [drill] continue drilling [pier] L-2 (Deep 36 [inches]) down +/- 45 [feet] starting to have problems. . . . [Bauer] BG 28 [drill] pulled off [pier] L-2 [and] moved to [pier] L-4. Shaft caving.”).

On April 5, 2013, Goettle placed lean fill in pier L-2. DX 54 at 107 (4/5/13 Eckert log book entry). But, three days later, the lean fill was not “set up.” DX 54 at 110 (4/8/13/ Eckert log book entry). Several days later, Goettle again drilled to the TORS elevation, but again encountered water issues. DX 54 at 114 (4/12/13 Eckert log book entry stating: “[Bauer] BG 28 [drill] moved back [to pier] L-2[;] drilling to TORS [elevation.] Hole running off bad.”). Goettle continued efforts to complete pier L-2, but water remained an issue. DX 54 at 124 (4/22/13 Eckert log book entry stating: “Pumped [pier] L-2 down, +/- 1 [foot] of water in bottom. Pulled pump[,], put ladder in hole. CTI inspector went in to inspect. +/- 8 [feet] of water in hole when he got to bottom. Could not see sidewalls of rock sockets. COE inspector refuse[s] to go in hole[.] Will not approve. Won’t go in hole unless it has been cleaned [and] he can see bottom.”), 125 (4/23/13 Eckert log book entry stating: +/- 26 [feet] of water in [pier] L-2. Pumped down to +/- 1 [foot]. CTI inspector in hole to inspect. Shut pump down for entry. +/- 3 [feet] of water in hole when CTI inspector got to bottom. . . . COE inspector went in to inspect. Said +/- 6 [feet] water in hole. . . . Pump water down to +/- 1 [foot]. CTI inspector back down hole. Rock socket good. COE inspector wants bottom hand cleaned before he will inspect. Argued that we will clean hole w[ith] muck[-] bucket just like [piers] L-3, L-4, [and] N.8-4. Said that was not acceptable on this hole.”). Eventually, the Army Corps approved pier L-2 to be completed in the wet. DX 54 at 127 (4/25/13 Eckert log book entry stating: “Set up to muck out [and] pour [pier] L-2.”).

d. Drilled Pier L-4.

In addition, Goettle encountered similar problems on pier L-4. DX 54 at 79 (3/13/13 Eckert log book entry stating: “Moved to [pier] L-4. Drilled to TORS [elevation and] set casing. Drilling rock socket. [Bauer] BG 28 [drill] worked on [pier] L-4 all day. Drilled down to +/- 45 [feet]. Shaft starting to run off [and] cave.”).

On April 10, 2013, Goettle re-drilled to the TORS elevation and set the casing. DX 54 at 112 (4/10/13 Eckert log book entry). On April 11, 2013, Goettle drilled, cleaned, and inspected the rock socket and received approval to pour concrete. DX 54 at 113 (4/11/13 Eckert log book entry). On April 15, 2013, Goettle completed pier L-4 in the wet. DX 54 at 117 (4/15/13 Eckert log book entry stating: “Mucked out [pier] L-4. . . . CSL pipe in [pier] L-4 filled w[ith] concrete[.]”).

e. Drilled Pier N.8-3.

Pier N.8-3 caused Goettle significant problems. On May 7, 2013, Goettle began drilling pier N.8.3. DX 54 at 142. On May 8, 2013, the shaft began to cave in, so Goettle backfilled the hole with concrete in an effort to stabilize it. DX 54 at 143 (5/8/13 Eckert log book entry). After the concrete set, the shaft was re-drilled with a cluster drill, but the shaft collapsed. DX 54 at 145–46 (5/10/13 and 5/11/13 Eckert log book entries). Next, Goettle filled pier N.8-3 with lean fill, but efforts to re-drill the shaft again resulted in collapse. DX 54 at 148, 150 (5/13/13 and 5/15/13 Eckert log book entries). Then, Goettle set casing in pier N.8-3, and additional drilling efforts were successful. DX 54 at 158–59 (5/23/13 Eckert log book entry).

On May 23, 2013, Goettle received approval to pour concrete, which it did the following day. DX 54 at 159 (5/24/13 Eckert log book entry). Thereafter, the Army Corps allowed Goettle to complete each of the five shafts in the wet. PX 46, 47, 54; *see also* TR 401–02 (Eckert). To keep on schedule during these events, Goettle “bought in a lot of extra [equipment.]” TR 535 (Vinson).

2. Approximately Ninety Other Drilled Piers Failed Inspection.

Approximately ninety drilled piers did not experience caving and water issues, but failed inspection. TR 410–11 (Eckert). In some instances, the third-party inspector and the Government inspector agreed that a shaft failed the inspection; on other occasions the two inspectors disagreed. TR 243 (Dillon).

Eight drilled piers failed, because they were not “plumb,” *i.e.*, not vertical within the Drilled Pier Specification’s requirements, attributed to drilling error. TR 493 (Eckert). The remainder failed, because the rock socket was not drilled in competent rock. TR 407, 493 (Eckert). When a shaft failed inspection, because the rock socket was not drilled in competent rock, the Army Corps directed Goettle to drill deeper. TR 407 (Eckert). Goettle did not disagree that the shafts failed inspection and required additional drilling. TR 505 (Eckert).

Once the preliminary tip elevations were reached, but before a pier was inspected, Goettle moved the rig, instead of “swing[ing] it out of the way for the inspection to take place.”²² TR 490 (Eckert). Goettle followed this practice, even if a shaft failed inspection, because Goettle was in a position to drill at a different location, where “the casings [were] . . . on hand[.]” TR 412 (Eckert). On this job, Goettle had to move the drill rigs numerous times. TR 415 (Eckert).²³ Once the preliminary tip elevations were reached, Goettle did not re-evaluate whether to move the drill rigs. TR 491 (Eckert). Goettle decided waiting for cleaning and inspection “was taking too long . . . and it was more expeditious to move to another hole and start drilling there.” TR 1099 (Keller).

Nevertheless, Walsh and Goettle had sole discretion to determine the order in which to drill the piers. Jt. Stip. ¶ 12.

E. On November 30, 2015, Walsh Construction Company Submitted A Request For Equitable Adjustment To The United States Army Corps Of Engineers, On Behalf Of Richard Goettle, Inc.

On November 30, 2015, Walsh submitted a Request For Equitable Adjustment (“REA”) on behalf of Goettle for “additional work at drilled shafts due to differing site conditions and disruption of work flow due to unnecessary inspections[.]” and requested \$8,763,119.00 for the additional costs incurred. PX 252; PX 253 at 1. The November 30, 2015 REA requested an equitable adjustment for the “Five Problems Shaft Issue,” and for a “differing site condition.”

²² At trial, the Government’s Geologist, Ms. Garrett, testified:

A. MS. GARRETT: Normally, [contractors] would stay there at the hole or move maybe a short distance away if they thought they might need to come back, but they would not spend the time to move equipment, especially if they had some experience on the site and knew, well, this socket may not pass the first inspection. If I sit tight for 15 minutes, however long it takes to do the inspection, I can continue drilling and not have to re-set up, because it takes a lot to reposition a rig. . . . So oftentimes – I think the picture of me actually centered over that pier, there was a drill rig in the background just waiting, and they, like, swing the body out of the way –

THE COURT: Right.

MS. GARRETT: -- until we’re done, so -- to me, personally, I think that maybe the time that they are claiming is due to their methods and not the Government’s lack of information or lack of input into the elevations.

TR 822-23 (Garrett).

²³ Plaintiffs argue that Goettle moved the drill rig on 471 more occasions than anticipated. Pl. Post-Tr. Br. at 62.

Gov't App'x at A54–A60; *see* 48 C.F.R. § (“FAR”) 52.243-5.²⁴ The November 30, 2015 REA incorporated Goettle's July 30, 2014 Request for Change Order (“RCO”), for \$7,047,220.00, and Goettle's revised March 19, 2015 RCO, for \$7,100,112.00. Compl. Ex. C. (7/30/14 RCO); *see also* Gov't App'x at A47 (3/19/15 Revised RCO).²⁵

Goettle's revised March 19, 2015 RCO included a request for an equitable adjustment for the “Downhole Inspection Issue,” *i.e.*, reimbursement for additional work undertaken by Goettle as a result of the Army Corps' inspections and re-inspections of the drill shafts. Gov't App'x at A60–A62.

²⁴ FAR 52.243-5 provides:

(a) The Contracting Officer may, in writing, order changes in the drawings and specifications within the general scope of the contract.

(b) The Contractor shall promptly notify the Contracting Officer, in writing, of subsurface or latent physical conditions differing materially from those indicated in this contract or unknown unusual physical conditions at the site before proceeding with the work.

(c) If changes under paragraph (a) or conditions under paragraph (b) increase or decrease the cost of, or time required for performing the work, the Contracting Officer shall make an equitable adjustment (see paragraph (d)) upon submittal of a proposal for adjustment (hereafter referred to as proposal) by the Contractor before final payment under the contract.

(d) The Contracting Officer shall not make an equitable adjustment under paragraph (b) unless—

(1) The Contractor has submitted and the Contracting Officer has received the required written notice; or

(2) The Contracting Officer waives the requirement for the written notice.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause.

48 C.F.R. § 52.243-5.

²⁵ The only material difference between the July 30, 2014 RCO and the March 19, 2015 RCO was the amount requested.

F. On April 18, 2016, The Contracting Officer Issued A Final Decision Denying Walsh Construction Company's November 30, 2015 Request For Equitable Adjustment.

On April 18, 2016, the CO issued a final decision denying Walsh's November 30, 2015 REA. JX 53. With respect to the "Five Problem Shafts," the CO found that the conditions encountered were not materially different from those represented in the Contract. JX 53 at 36–41. With respect to the "Downhole Inspection Issue," the CO found that the Army Corps' inspection program was a contract requirement and, therefore, could not be considered a differing site condition under FAR 52.243-5. JX 53 at 49–50 (The Contract incorporated the FAR "Inspection of Construction" clause, providing that all work was "subject to Government inspection . . . to ensure strict compliance with the terms of the contract.").

II. PROCEDURAL HISTORY.

On July 19, 2016, Walsh, acting on behalf of Ammero and Goettle (collectively hereafter "Plaintiffs"), filed a Complaint ("Compl.") in the United States Court of Federal Claims. ECF No. 1. Count One alleged that the "Downhole Inspection Issue" resulted in Government-caused delay and "additional costs" in the amount of \$6,415,974.00. Compl. ¶¶ 23, 29. Count Two alleged that the Army Corps breached the duty of good faith and fair dealing by "subjecting Goettle to a myriad of unnecessary and abusive additional equipment, tooling[,] and labor costs," with damages in the amount of \$6,415,974.00. Compl. ¶¶ 32-33. Count Three alleged a differing site condition claim concerning the "Five Problems Shafts," for which damages in the amount of \$631,247.00 are owed. Compl. ¶¶ 35, 41.

On October 19, 2016, the Government filed an Answer. ECF No. 6. On December 12, 2016, the parties submitted a Joint Preliminary Status Report. ECF No. 7. On December 20, 2016, the court convened a telephone status conference. On January 12, 2017, the parties submitted a Joint Proposed Trial Schedule, and on January 13, 2017, the court entered a Scheduling Order. ECF Nos. 8, 9.

On February 13, 2017, Plaintiffs filed an Amended Complaint that restated the initial three counts, but revised the damages requested under Counts One and Two, to \$2,897,367.00 for each Count. Amend. Compl. ¶¶ 29, 33.²⁶ On that same day, the Government filed a Motion To Dismiss In Part, Or In The Alternative, To Merge Counts, arguing that the court should dismiss Counts One and Two of the February 13, 2017 Amended Complaint for lack of subject matter jurisdiction or, in the alternative, merge Counts One and Three, because they alleged entitlement to the same compensation. Gov't Mot. at 1. On February 27, 2017, Plaintiffs filed a Response ("Pl. Resp."). On March 17, 2017, the Government filed a Reply ("Gov't Reply"), together with a Supplemental Appendix ("Gov't Supp. App'x").

²⁶ The July 19, 2016 Complaint and the February 13, 2017 Amended Complaint otherwise are identical.

On May 31, 2017, the court issued a Memorandum Opinion And Order denying the Government's February 13, 2017 Motion To Dismiss and the Government's alternative Motion To Merge Counts One and Three, and staying the case to allow Plaintiffs to present the breach of the duty of good faith and fair dealing claims alleged in Counts One and Two to the CO for a final decision. *See Walsh Constr. Co. et al. v. United States*, 132 Fed. Cl. 282 (Fed. Cl. 2017).

On August 22, 2017, Plaintiffs submitted an amended claim to the CO, based on the breach of the duty of good faith and fair dealing. JX 59.

On September 15, 2017, the court convened a telephone status conference. On November 30, 2017, the parties filed a Proposed Pretrial Schedule. ECF No. 19. On December 18, 2017, the CO issued a final decision denying Plaintiffs' amended claim regarding the breach of the duty of good faith and fair dealing. JX 70. On December 21, 2017, the court convened a telephone status conference to discuss the proposed schedule. On January 9, 2018, the court issued a Scheduling Order. ECF No. 21.

On January 17, 2018, the parties filed a Proposed Pretrial Schedule. ECF No. 23. On January 18, 2018, the court issued a Pretrial Scheduling Order. ECF No. 24. On January 22, 2018, the Government filed a Motion To Stay All Deadlines due to a lapse in appropriations, ECF No. 25, that on January 23, 2018, the court denied as moot.

On January 29, 2018, Plaintiffs filed a Second Amended Complaint. ECF No. 26. On February 23, 2018, Plaintiffs filed a Third Amended Complaint. ECF No. 27. On March 6, 2018, the Government filed an Answer to the Amended Complaint. ECF No. 28.

On March 9, 2018, Plaintiffs filed a Pretrial Brief ("Pls. Pretrial Br."), Plaintiffs' Witness List, and Plaintiffs' Exhibit List. ECF Nos. 29–31. On that same day, the Government filed a Pretrial Brief ("Gov't Pretrial Br."), Government's Witness List, and Government's Exhibit List. ECF Nos. 32–34. On March 12, 2018, the parties filed a Joint Exhibit List ("Jt. Ex. List"). ECF No. 35. On March 13, 2018, the court convened the Final Pretrial Conference. On that same day, Plaintiffs filed an Amended Joint Exhibit List. ECF No. 36. In addition, the Government filed an Amended Final Exhibit List. ECF No. 37. On March 15, 2018, the parties filed Joint Stipulations Of Fact ("Jt. Stip."). ECF No. 38.

On March 19, 20, and 22, 2018, the court convened a trial at the United States Court of Federal Claims in Washington, D.C. ECF Nos. 44-46 ("TR 1-869").

On March 30, 2018, Plaintiffs filed the expert reports of Construction Process Solutions, Ltd. ("CPS Direct") and Dan Brown and Associates ("Brown Direct"). ECF Nos. 40-1, 40-2. On that same day, the Government filed the expert report of Jerry DiMaggio ("DiMaggio Direct"), and Mr. DiMaggio's rebuttal expert report ("DiMaggio Rebuttal"). ECF Nos. 42-1, 42-2.

On April 4, 2018, the court reconvened the trial to allow the parties to cross-examine the expert witnesses. ECF No. 48 ("TR 870-1143").

On May 11, 2018, the court convened a post-trial scheduling conference. On May 15, 2018, the parties filed a Joint Status Report that included a proposed post-trial briefing schedule. ECF No. 50. On May 17, 2018, the court issued a Post-Trial Briefing Order. ECF No. 51.

On May 30, 2018, Plaintiffs filed a Post-Trial Brief (“Pls. Post-Tr. Br.”). ECF No. 52. On June 27, 2018, the Government filed a Post-Trial Brief (“Gov’t Post-Tr. Br.”). ECF No. 53.

III. DISCUSSION.

A. Subject Matter Jurisdiction.

The United States Court of Federal Claims has jurisdiction, under the Tucker Act, to adjudicate any claim arising under the Contract Disputes Act (“CDA”), 41 U.S.C. §§ 7101–7109, and that has been submitted to a CO for a final decision. *See* 28 U.S.C. § 1491(a)(2) (“The Court of Federal Claims shall have jurisdiction to render judgment upon any claim by or against, or dispute with, a contractor arising under section 7104(b)(1) of title 41 . . . on which a decision of the contracting officer has been issued[.]”); *see also* 41 U.S.C. § 7104(b)(1) (“[I]n lieu of appealing the decision of a contracting officer . . . to an agency board, a contractor may bring an action directly on the claim in the United States Court of Federal Claims.”).

The term “claim” is defined “as a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract.” 48 C.F.R. § 52.233-1. Although a CDA claim need not be submitted in any particular form or use any particular wording, it must contain “a clear and unequivocal statement that gives the contracting officer adequate notice of the basis and amount of the claim.” *Contract Cleaning Maint., Inc. v. United States*, 811 F.2d 586, 592 (Fed. Cir. 1987). The CDA also requires that the claim indicate to the contracting officer that the contractor is requesting a “final” decision. *See James M. Ellett Constr. Co. v. United States*, 93 F.3d 1537, 1543 (Fed. Cir. 1996).

A claim “arises under” the CDA if it is based on

any express or implied contract . . . made by an executive agency for—(1) the procurement of property, other than real property in being; (2) the procurement of services; (3) the procurement of construction, alteration, repair, or maintenance of real property; or (4) the disposal of personal property.

41 U.S.C. § 7102(a).

In this case, the February 13, 2017 Amended Complaint includes three Counts. Counts One and Two allege that the Government breached the duty of good faith and fair dealing causing “substantial additional . . . costs” and entitling Plaintiffs to \$2,897,367 in damages. Am. Compl. ¶¶ 21–33. Count Three alleges that the Government breached the Contract as a result of a differing site condition, for which Plaintiffs are entitled to \$604,957 in damages. Am. Compl. ¶¶ 34–41. The February 13, 2017 Amended Complaint also alleges claims that arise under the CDA and were submitted to the CO on November 30, 2015 and August 22, 2017, but subsequently were denied. JX 70.

For these reasons, the court has determined that it has jurisdiction to adjudicate these claims.

B. Standing.

The United States Supreme Court has held that “the question of standing is whether the litigant is entitled to have the court decide the merits of the dispute or of particular issues.” *Warth v. Seldin*, 422 U.S. 490, 498 (1975). “The party invoking federal jurisdiction bears the burden of establishing [standing].” *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 561 (1992). The United States Supreme Court held in *Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs., Inc.*, 528 U.S. 167 (2000), that, to establish standing,

a plaintiff must show (1) it has suffered an “injury in fact” that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Id. at 180–81.

In addition, “[t]o have standing to sue the sovereign on a contract claim, a plaintiff must be in privity of contract with the United States.” *Anderson v. United States*, 344 F.3d 1343, 1351 (Fed. Cir. 2003); *see also Ransom v. United States*, 900 F.2d 242, 244 (Fed. Cir. 1990) (“To maintain a cause of action pursuant to the Tucker Act that is based on a contract, the contract must be between the plaintiff and the [G]overnment.”).

As a matter of law, however, a subcontractor may not independently file a claim against the Government, without being in privity of contract. *See Severin v. United States*, 99 Ct. Cl. 435, 442 (Ct. Cl. 1943) (“The subcontractor could not sue the Government since it has not consented to be sued except, so far as relevant to this case, for breach of contract.”); *see also Erickson Air Crane Co. v. United States*, 731 F.2d 810, 813 (Fed. Cir. 1984) (“The [G]overnment consents to be sued only by those with whom it has privity of contract, which it does not have with subcontractors.”). For a subcontractor to file a complaint in the United States Court of Federal Claims, the prime contractor must initiate a “pass-through” claim, on behalf of the subcontractor. *See Severin*, 99 Ct. Cl. at 443.

The February 13, 2017 Amended Complaint alleges that Walsh was in privity of contract with the Government. Am. Compl. ¶ 6 (“On August 17, 2012, Walsh contracted with [the Army Corps] (reference contract number W912DR-12-C-011) to construct the [DLA Facility] in New Cumberland, PA[.]”). And, Ammero and Goettle, Walsh’s subcontractors, allege that they were in privity of contract with Walsh. Am. Compl. ¶¶ 7–8 (“On November 26, 2012[,] Walsh entered into a subcontract with Ammero in which Ammero was to furnish and install 272 drilled piers and a number of rock anchors for the [DLA Facility.] . . . On December 4, 2012[,] Ammero entered into a subcontract with Goettle in which Goettle was to furnish and install 272 drilled piers and a number of rock anchors for the [DLA Facility.]”). Therefore, because Walsh filed a complaint on behalf of Goettle, all of the alleged claims therein were passed through to Walsh.

The February 13, 2017 Amended Complaint also alleges that Plaintiffs incurred financial injury that is concrete, particularized, and fairly traceable to the Army Corps’ actions. Am. Compl. at ¶¶ 29 (alleging that Goettle incurred specific costs “[a]s a direct and proximate result of the

forgoing delays, suspensions[,] and inefficiencies to its work”), 33 (alleging that Goettle incurred specific damages “[a]s a direct and proximate result of” the conduct of the Army Corps), 41 (alleging that Goettle suffered specific damages “[a]s a direct and proximate result of [a] changed condition”). And, any financial injury established by Plaintiffs can be addressed by a monetary award.

For these reasons, the court has determined that Plaintiffs have standing to seek an adjudication of the claims alleged in the February 13, 2017 Amended Complaint.

C. Whether Plaintiffs Met Their Burden Of Proof, At Trial, To Establish The Allegations In The February 13, 2017 Amended Complaint.

1. Whether The Government Violated The Duty Of Good Faith And Fair Dealing, Thereby Breaching The Contract (Counts One and Two).

a. Plaintiffs’ Argument.

Under the Contract, “Goettle had a reasonable expectation that [the Army Corps’] unreasonable action or inaction would not . . . hinder, interfere with, or otherwise impact . . . Goettle’s ability to efficien[tly] and productively . . . drill each pier to the [p]ier [e]levations *specified by [the Army Corps]*.” Pl. Post-Tr. Br. at 61 (original emphasis). But, the Army Corps “exploited and abused the [m]andated [i]nspection [p]rocedure . . . to save [the Army Corps] money.” Pl. Post-Tr. Br. at 61–62. The Contract did not include an “inspection unit price . . . for each time [the Army Corps] miscalculated [p]ier [e]levations and forced Goettle to remobilize and re-drill each [of the Five Problem Shafts]. Pl. Post-Tr. Br. at 61. Instead, the Contract “provided for a unit price for linear feet drilled[.]” Pl. Post-Tr. Br. at 61. Thus, to “save money on the total linear feet to be drilled, [the Army Corps] set [p]ier [e]levations it knew were likely not deep enough . . . [and] then used the [m]andated [i]nspection [p]rocedure to correct the errors in its calculations.” Pl. Post-Tr. Br. at 62. As a result, the Army Corps “systematically failed to properly identify [p]ier [e]levations that would satisfy the [Drilled Pier] Specification[] on nearly thirty percent [] of the shafts, as required by the Contract.” Pl. Post-Tr. Br. at 62.

As a direct result of this conduct, Plaintiffs “were unjustifiably forced to demobilize and remobilize *471 more times* on this Project than was contemplated by the Contract, which substantially increased their costs.” Pl. Post-Tr. Br. at 62 (original emphasis). In addition, following the post-award rock coring, the Army Corps “reduced the bid quantities by 38%, which saved the [Army] Corps a grossly disproportionate amount of money compared to the substantial increase in cost borne by Goettle.” Pl. Post-Tr. Br. at 62.

The Army Corps also prevented Goettle from “us[ing] a muck-bucket tool to remove all of the debris from the bottom of [each] shaft – the industry standard for cleaning a drilled shaft[.]” the method Goettle expected to use when it bid on the subcontract. Pl. Post-Tr. Br. at 62. Instead, the Army Corps “arbitrarily required Goettle to perform time[-]intensive hand cleaning . . . prior to the inspection of each drilled pier.” Pl. Post-Tr. Br. at 62. Consequently, Goettle incurred “countless, unplanned man-hours in cleaning each hole before inspection[.]” Pl. Post-Tr. Br. at 63.

These actions by the Army Corps interfered with Goettle's ability to "complete its work in the sequence as planned, in an orderly manner, and without multiple movements of its drill rigs through an increasingly congested Project site." Pl. Post-Tr. Br. at 63. In sum, the Army Corps "instituted arbitrary requirements and abusively used the Contract's Mandated Inspection Procedure in a manner that affirmatively hindered Plaintiffs' performance and deprived them [of the] benefits reasonably expected from the Contract." Pl. Post-Tr. Br. at 63.

b. The Government's Response.

The Government responds that Walsh failed to establish that the Army Corps destroyed Walsh's reasonable expectations regarding the Project. Gov't Post-Tr. Br. at 49. This is so, because Walsh's expectations were based on a prior job with "completely different" geology. Gov't Post-Tr. Br. at 49. In addition, Walsh did not present any evidence at trial to establish that the Army Corps: (1) acted to save money; (2) improperly set tip elevations; (3) conducted inspections unreasonably; or (4) otherwise interfered with Goettle's performance. Gov't Post-Tr. Br. at 49. Moreover, the Army Corps' actions were not only permitted, but required, by the Contract. Gov't Post-Tr. Br. at 49.

The Contract cited the uncertainty inherent in karst geology. JX 51 at 4-5. Walsh's proposal also reflected that it understood the risk of failed shaft inspections and that additional drilling may be required. JX 55 at 16 ("Site Access and Logistics are an inherent risk to any project. . . . Underground voids in limestone pose a risk to settlement of building foundations."), 31 (Walsh will "utilize three crawler mounted drill rigs" to complete "additional excavation[,] if "voids are detected."). Therefore, Walsh should be held to that bargain. Gov't Post-Tr. Br. at 51-52.

Walsh also failed to demonstrate that the tip elevations were established in a manner other than that required by the Contract; in fact, the trial testimony confirmed that the elevations were set based on the best available information. TR 777 (Garrett); *see also* TR 821-22 (Garrett) ("It's in . . . the Government's best interests, the [P]roject's best interests to do our best estimate. . . . We put a lot of thought into these elevations and believe that we gave all the information needed to a contractor to adequately bid the job."). The Army Corps acted reasonably in setting the tip elevations, because two-inch rock cores provided only limited information; in contrast, the drilled shaft had a final diameter ranging from thirty to seventy-two inches. TR 816, 818 (Garrett) ("[T]he cores were one indicia and you do not know the answer until you dig."); *see also* DDX 1 (demonstrative illustrating variance between rock core and total diameter of drilled shaft). Walsh's expectation that the initial pier elevations were final and would require no additional drilling was unreasonable, because Walsh assumed the conditions on this Project would be the same as the BRAC Warehouse Project situated in a "completely different" terrain. Gov't Post-Tr. Br. at 54 (citing TR 780 (Garrett) ("[T]he rock type was completely different. . . . [T]his one was limestone, and that rock is a claystone/siltstone, a different type of geology. It did not have voids like this one did.")).

The Army Corps also reasonably exercised the contractual right to inspect the drilled shafts. JX 49 at 8 (Drilled Pier Specification providing that the "[CO] may inspect each drilled pier excavation (1) at the time of drilling, to inspect the rock in the pier base and rock socket for acceptability; and (2) prior to the placement of concrete, to make sure the hole is in the proper

condition for concreting. Sufficient time shall be provided to permit inspection of the pier hole and a check of all dimensions by the [CO].”). In addition, each drilled shaft was required to be inspected by a third-party Geotechnical Engineer. JX 49 at 8 (Drilled Pier Specification providing that “[e]ach drilled pier excavation shall be checked by the [third-party] Geotechnical Engineer to ensure that it meets the requirements [of the Drilled Pier Specification] before any concrete is placed”). Therefore, each pier required “*at least one* inspection.” Gov’t Post-Tr. Br. at 54 (original emphasis).

Similarly, the Drilled Pier Specification required that the rock socket be placed in competent rock and was clear that additional drilling may be necessary. JX 49 at 12 (defining acceptable rock for pier base and shaft). Moreover, the Army Corps paid Walsh for all additional drilling and excavation that was performed, *i.e.*, per linear foot excavated. TR 62-63 (Naughton). Walsh chose the unit prices paid to Goettle, and, therefore, cannot now claim that price was inadequate. Walsh bargained for, and received, payment based on the unit prices in the Contract. Gov’t Post-Tr. Br. at 56.

It also was reasonable for the Army Corps to require Goettle incrementally to excavate additional depths, instead of adding “a ‘contingency’ of one or two additional feet when setting rock socket evaluations.” Gov’t Post-Tr. Br. at 57 (citing TR 907). Neither the Drilled Pier Specification nor industry practice requires over-drilling, because it risks placing the rock socket in unsound rock, potentially uncovering additional voids or sources of water. Gov’t Post-Tr. Br. at 57-58 (citing JX 49). Therefore, it would be unreasonable for the Army Corps to require Goettle to over drill. TR 761 (Garrett); TR 910 (Brown) (Plaintiff’s expert geologist clarifying he “never meant to imply [that the Army Corps] should have just added two feet across the board”).

Walsh contends that it bid the Project “with the expectation that it could use a muck-bucket tool to remove debris,” instead of “intensive hand cleaning.” Pl. Post-Tr. Br. at 62. Walsh, however, did not establish how hand cleaning destroyed its reasonable expectations under the Contract. Gov’t Post-Tr. Br. at 59.²⁷ In fact, Goettle’s CEO testified that the real problem encountered was not hand cleaning, but that the depths required to find sound rock were different than those Goettle experienced at the BRAC Warehouse Project. TR 1061 (Keller).²⁸

²⁷ In addition, the Federal Highway Manual for constructing drilled piers, written by Plaintiffs’ expert witness, discusses the need to clean drilled shafts, even when the load is borne through side-shear resistance. DX 111 at 9-15.

²⁸ Mr. Keller, President and Chief Executive Officer of Goettle, testified:

A. MR. KELLER: I believe they set the depths significantly deeper in the formation [on the BRAC Warehouse job], so that when they went down and looked at them, there [were not] the problems that they had on this job . . .

THE COURT: So it wasn’t the cleaning. It was just the depth.

A. MR. KELLER: These holes were much shallower than on the other job.

c. The Court's Resolution.

The United States Court of Appeals for the Federal Circuit has defined the duty of good faith and fair dealing as “the duty not to interfere with the other party’s performance and not to act so as to destroy the reasonable expectations of the other party regarding the fruits of the contract.” *Centex Corp. v. United States*, 395 F.3d 1283, 1304 (Fed. Cir. 2005). “Both the duty not to hinder and the duty to cooperate are aspects of the implied duty of good faith and fair dealing.” *Metcalf Constr. Co. v. United States*, 742 F.3d 984, 991, (Fed. Cir. 2014) (quoting *Precision Pine & Timber v. United States*, 596 F.3d 817, 820 n.1 (Fed. Cir. 2010)). Although it “is rarely possible to anticipate in contract language every possible action or omission by a party that undermines the bargain,” the terms of the contract and the “nature of that bargain” inform the reasonable expectations of the parties. *Metcalf*, 742 F.3d at 991. “[T]he implied duty of good faith and fair dealing[, however,] cannot . . . create duties inconsistent with the contract’s provisions.” *Precision Pine*, 596 F.3d at 831.

The United States Court of Appeals for the Federal Circuit has recognized that the Government may violate the implied duty of good faith and fair dealing when its acts or omissions are “inconsistent with the contract’s purpose and deprive the other party of the contemplated value.” *Metcalf*, 742 F.3d at 991. For example, an unreasonable “lack of diligence” may violate the implied duty of good faith and fair dealing. *Id.* (quoting *Malone v. United States*, 849 F.2d 1441, 1445 (Fed. Cir. 1988)). In addition, the duty of good faith and fair dealing may be violated where a party engages in “subterfuges and evasions.” *See Malone*, 849 F.2d at 1445; *see also* RESTATEMENT (SECOND) OF CONTRACTS § 205 cmt. d (1981) (“Subterfuges and evasions violate the obligation of good faith in performance[, even though the actor believes his conduct to be justified.”]).

The relevant contractual documents evidence that Plaintiffs’ expectation that the preliminary tip elevations would not require revision was not reasonable. The Solicitation, as amended, states that the estimated tip elevations and rock socket lengths would not be finalized until pier inspection was “approved in the field during construction.” DX 130 at 11; *see also* TR 816 (Garrett) (“We have done a rock core to see that the entire length is competent rock. So we . . . are confident that at least in that three-inch core, there’s competent rock the entire length of the rock socket for the elevation shown here, but we understand and we’ve warned everyone in all of our documents that there is variability, and this is only a three-inch hole. . . . But[,] then in the field, when the full diameter is excavated, there may be adjustments that need to be made[.]”). And, the Final Geotechnical Report clearly stated that the estimated excavation quantities were preliminary. JX 51 at 16 (“Preliminary drilled pier quantity estimates are provided . . . quantities shall be considered preliminary.”).

In addition, Plaintiffs’ contention that the Army Corps abused the inspection process to correct “miscalculated” tip elevations and save money is not supported by the record. As the Government’s expert testified, setting a “minimum rock socket [length] is necessary to assure that the drilled pier has adequate load[-]carrying capacity[, which is assured during the design phase.” DiMaggio Direct at 17. The variable nature of karst geology requires a contractor not to “assume

TR 1061 (Keller).

that, if all of the [tip elevations] were uniformly set lower[,] . . . one could confidently and consistently assume a satisfactory bottom of shaft elevation would result.” DiMaggio Direct at 28. Therefore, “[t]he degree of uncertainty remains high in [k]arst geology, . . . because of [its] extreme horizontal and vertical variability[.]” DiMaggio Direct at 51. If it became apparent that the preliminary elevations were not sufficient for a particular drilled pier, “additional drilling was incremental[,]” because “[d]rilling a full ‘new’ rock socket length is not a guarantee that additional voids or weathered rock material will not be encountered.” DiMaggio Direct at 52. Likewise, the Government’s demonstratives show the potential adverse consequences of drilling by a uniform amount, instead of determining the incremental amount by which to drill. DDX 1; *see also* TR 696 (Tucker) (“[I]t’s not guaranteed just going deeper that you’re going to find better rock, just because . . . I could have really good, competent rock here for, you know, 15 feet, 20 feet, and then all of a sudden I run into some voids way down deep, so I would have gone through that really good material and gotten myself into bad material. So just by the way it’s solutioned, [drilling deeper from the outset is] not necessarily a viable thing to do.”). As the Government’s Geologist also explained, rock socket length is the defined length required to provide the requisite side-shear resistance. TR 821 (Garrett) (“I just want to make it clear, this is not a minimum rock socket length. It’s the designed rock socket length. So when we say we want a socket that’s 6 1/2 feet, we want a socket that’s 6 1/2 feet. We don’t want a seven-foot socket with imperfections in the middle. We want a 6 1/2-foot socket that meets the specifications for the rock socket rock.”).

Plaintiffs also did not establish that the costs Goettle incurred, by the unanticipated moving of drilling equipment, were caused by the Army Corps.²⁹ According to Goettle’s Operations Manager, the failed inspections had a “huge impact” on the job schedule, because “[n]ot only did it tie up drill rigs, . . . bringing them back to the hole to drill these shafts deeper, it tied up the casing that was in the hole[,] because the casing couldn’t be removed until the hole was complete.” TR 411 (Eckert). In other words, if a hole failed inspection, Goettle was “prevented from using [a drill] in other holes that [Goettle] had planned to drill that day. . . . [I]t completely disrupted [Goettle’s] ability to plan the job and execute the work the way that [it] had planned to.” TR 411 (Eckert). But, it was Goettle that made an independent decision to move drilling equipment that caused Goettle to incur additional cost. *Jt. Stip.* ¶ 11.

²⁹ As Ms. Garrett, the Government’s Geologist, testified:

THE COURT: . . . [Ms. Garrett’s] professional observation onsite was she did not know why [Goettle] moved equipment away when they might not have needed to do it[,] if they stayed a shorter time period to . . . see the result of the inspection. . . . [I]t takes more time to go get the stuff to bring it back to do the next three feet than if it was left on the premises precisely at the place where they were digging. Did I get that right?

A. MS. GARRETT: Yeah.

TR 823 (Garrett).

Nor did Plaintiffs establish that the Army Corps' requirement, that holes be cleaned by hand, destroyed Goettle's reasonable expectations under the Contract. It is true that the Contract requires cleaning and does not specify the type of cleaning. TR 1077 (Keller). But, the Drilled Pier Specification, that was part of the Contract, included a "Government Inspection" clause, providing that all work was subject to inspection to ensure compliance with the terms of the Contract. JX 49 at 8 (allowing the Government to inspect "the rock [in the] pier base and rock socket for acceptability . . . to make sure the hole is in proper condition for concreting"). "Downhole"³⁰ inspections, however, require the same steps to be performed as hand cleaning. TR 358-60 (Eckert) (explaining the cleaning necessary prior to a downhole inspection); *see also* TR 1078 (Keller).³¹ The real problem was that Goettle did not anticipate downhole cleaning, based on its experience at the BRAC Warehouse Project. TR 96 (Pagone). But, even at the BRAC Warehouse Project, the Army Corps initially conducted downhole inspections. TR 96 (Pagone) (testifying that a downhole inspection was not performed on each pier, but "anywhere from three to ten of the first shafts were downhole inspected"). Therefore, Goettle should have anticipated that the Army Corps could conduct downhole inspections on this Project. As such, Plaintiffs failed to establish that hand cleaning was "inconsistent with the [C]ontract's purpose and deprive[d] the contractor of the contemplated value." *Metcalf*, 742 F.3d at 991.

For these reasons, the court has determined that Plaintiffs failed to establish, by a preponderance of the evidence, that the Army Corps violated the duty of good faith and fair dealing. Accordingly, Counts One and Two of the February 13, 2017 Amended Complaint are dismissed.

³⁰ A "downhole entry" is "where an individual lowers himself into a drilled pier caisson to inspect the rock socket." TR 116 (Pagone).

³¹ As Mr. Keller, Goettle's President and Chief Executive Officer testified, his real concern was the extra time a downhole inspection, which entailed hand cleaning, required:

Q. GOVERNMENT COUNSEL: But the checking of the hole for the air and things like that would have had to be done for the inspector to go down anyway, right?

A. MR. KELLER: The holes average 22 feet deep. You can see everything you need to see from up on existing -- on the ground surface.

Q. GOVERNMENT COUNSEL: Well, that was the real complaint. You didn't think you needed to go in the hole, right?

A. MR. KELLER: Yes.

TR 1078 (Keller).

2. Whether Plaintiffs Are Entitled To Recover Costs For A Differing Site Condition At The Defense Logistics Agency Headquarters Site (Count Three).

a. Plaintiffs' Argument.

Next, Plaintiffs argue that this case presents a “quintessential Type I Differing Site Condition claim[,]” as it “involves subsurface or latent physical conditions at a project site, which differ materially from those indicated in the contract.” Pl. Post-Tr. Br. at 56. The Geotechnical Report “provided a very distinct representation of the subsurface materials that Goettle was expected to drill.” Pl. Post-Tr. Br. at 57. The Army Corps also performed post-award “additional subsurface analysis through pier-specific rock coring,” that is “a rare exercise that provides the contractor with more subsurface information than it would typically possess.” Pl. Post-Tr. Br. at 57. Therefore, “Goettle reasonably interpreted [the Army Corps’] pre-bid Geotechnical Report and post-award rock coring as a representation that the [Project site’s] subsurface conditions did not include tremendous inflow of water at . . . the Five Problem Shafts[.]” Pl. Post-Tr. Br. at 57. In addition, Goettle did not expect the Army Corps to “require [Goettle] to finish the Five Problem Shafts in the dry instead of . . . in the wet[,] as permitted” under the Contract. Pl. Post-Tr. Br. at 57.

In fact, Goettle “reasonably relied on the . . . [c]ontract [d]ocuments, including the pre-bid Geotechnical Report and, later, [the Army Corps’] actual rock cores.” Pl. Post-Tr. Br. at 58. “[N]othing in these documents, reports[,] and tests would indicate to a reasonable contractor that one should expect to encounter the conditions actually encountered on the Five Problem Shafts.” Pl. Post-Tr. Br. at 58. This is so, because the contract documents “did not give [Goettle] any reason to foresee the unforeseen subsurface conditions actually encountered[.] . . . Walsh and Goettle simply could not have anticipated the dewatering issue that destabilized the [Five Problem S]hafts.” Pl. Post Tr.-Br. at 58.

The Army Corps also “not only provided Goettle with subsurface investigations and reports, but . . . specifically instructed Goettle to rely on that information when preparing the bid on the Project.” Pl. Post-Tr. Br. at 59. And, “Goettle, in fact, bid the Project based on the subsurface conditions specified by the [Army Corps].” Pl. Post-Tr. Br. at 59. Specifically,

Goettle expected that for each pier, it could: drill down as specified through the overburdened soil and weathered rock to reach the [TORS] (the point from which the Pier Elevations began); install a temporary casing at [TORS]; and then drill the rest of the pier to the specified elevation. And, on 267 of the 272 drilled piers, this was the sequence of Goettle’s work.

Pl. Post Tr.-Br. at 59.

Therefore, “Goettle detrimentally relied upon the representations made in the [c]ontract documents.” Pl. Post-Tr. Br. at 59.

In addition, “substantial water seepage” caused Goettle to

materially alter i[t]s work plan for the Five Problem Shafts[: i]nstead of drilling down to the [TORS] and installing the temporary casing, Goettle was forced to drill two feet at a time and perpetually backfill the hole with lean fill or concrete to stabilize the loose rock slabs and allow for further advancement. Goettle again encountered voids, open fractures[,] and joints in drilling the actual rock socket, which also required Goettle to back-fill the rock socket shafts repeatedly with concrete and lean fill in order to complete the construction in accordance with the [Drilled Pier] Specification[.]

Pl. Post-Tr.-Br. at 59.

Plaintiffs add, this process “demand[ed] a substantial amount of additional labor” and time. Pl. Post-Tr. Br. at 59. As a result of the Army Corps’ “unreasonable insist[ance] that Goettle excavate and continuously attempt to completely dewater each of the Five Problem Shafts . . . , Goettle incurred substantial expenses for additional labor, time[,] and idle equipment, as well as other delay related costs.” Pl. Post-Tr. Br. at 59–60. “These unforeseen conditions were neither disclosed nor discovered in either [the Army Corps’] pre-bid Geotechnical Report nor in [the Army Corps’] post-award, pier-specific rock corings.” Pl. Post-Tr. Br. at 63. Thus, “Goettle has established that the conditions actually encountered on the Project site differed materially from the representations made in the bid and contract documents” and that Goettle incurred unexpected costs as a result. Pl. Post-Tr. Br. at 59–60.

b. The Government’s Response.

The Government responds that Plaintiffs abandoned an initial contention that the voids and caving-in were a differing site condition, but now asserts that the presence and amount of groundwater was a differing site condition. Gov’t Post-Tr. Br. at 64.

The Final Geotechnical Report indicated the presence of groundwater at 35 feet and noted that the “karstic nature of the site geology made it difficult to predict local groundwater conditions[,]” so “the occurrence of solution cavities, clay seams, and fractures would impact local groundwater levels and flow behavior.” JX 51 at 6–7. In addition, the contemporaneous documents, prepared by Plaintiffs during excavation, evidence that the difficulties with the Five Problem Shafts primarily were due to shaft collapses caused by voids in the rock. Gov’t Post-Tr. Br. at 64.³² Therefore, Plaintiffs’ argument, that the Contract “represent[ed] that the Project’s subsurface conditions did not include a tremendous inflow of water at the base of each of the [Five Problem Shafts that] would make dewatering impossible[,]” was not substantiated. Pl. Post-Tr. Br. at 57.

³² The Government’s proposed factual findings are found in the June 27, 2018 Post-Trial Brief at 27–32. The most relevant proposed finding that discusses contemporaneous records is ¶ 106, that refers to Mr. Eckert’s contemporaneous project notes that discuss “boulders caving,” but do not mention water. Gov’t Post-Tr. Br. at 31 (citing JX 40 at 55; PX 161).

There also is no merit to the argument that Plaintiffs could not “have expected to be required to finish the [Five Problem Shafts] in the dry[,] instead of being permitted to finish them in the wet.” Pl. Post-Tr. Br. at 57. The Contract states a preference for completing piers “in the dry,” by requiring the contractor to attempt dewatering, although it permits completing piers “in the wet” under certain circumstances. JX 49 at 11, 13, 15. For example, the record reflects that when Goettle requested permission to complete a pier in the wet, permission was granted the next day. TR 477 (Eckert).³³ But, in many circumstances, the Army Corps could not determine whether dewatering was impossible, without first requiring that dewatering at least be attempted. Gov’t Post-Tr. Br. at 66. Therefore, requiring Plaintiffs to attempt dewatering before permitting completion “in the wet” should be viewed as the Army Corps insisting on compliance with an agreed contractual provision. Gov’t Post-Tr. Br. at 66.

Finally, although Walsh argues that it could not foresee that it would be required to attempt dewatering, that is not a cognizable differing site conditions claim. Gov’t Post-Tr. Br. at 67. Enforcing a contractual requirement to dewater shafts is not a physical condition and, in any event, the Army Corps made no representation to Plaintiffs that the Army Corps would not enforce a contracted requirement. Gov’t Post-Tr. Br. at 67.

c. The Court’s Resolution.

FAR 52.236-2 provides that a contractor may recover for differing site conditions under two circumstances: first, if the contractor encounters “[s]ubsurface or latent physical conditions at the site which differ materially from those indicated in th[e] contract” (“Type I”); and second, if there are “[u]nknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract” (“Type II”).³⁴ See 48 C.F.R. § 52.236-2(a). The contractor is required to provide written notice to the CO, who is required then to investigate the conditions, and, if they differ in the ways contemplated by the contract, provide an equitable adjustment to the contract price. See 48 C.F.R. § 52.236-2(b).

³³ Mr. Eckert, Goettle’s Operations Manager, testified:

Q. GOVERNMENT COUNSEL: So the day after the pump stopped working, the [Army] Corps approved you to place concrete in the . . . wet hole?

A. MR. ECKERT: Yes.

Q. GOVERNMENT COUNSEL: One day after?

A. MR. ECKERT: One day after the 23rd.

TR 477 (Eckert).

³⁴ Plaintiffs did not allege a Type II differing site condition claim. Am. Compl. ¶¶ 34–41.

To receive an equitable adjustment for a Type I differing site condition, Plaintiffs must prove that: (1) “a reasonable contractor reviewing the contract documents as a whole would interpret them as making a representation about the site conditions[;]” (2) “the actual site conditions were not reasonably foreseeable to the contractor, with the information available to the particular contractor outside the contract documents” (i.e., reasonable foreseeability); (3) “the particular contractor in fact relied on the contract representation[;]” and (4) “the conditions differed materially from those represented and . . . the contractor suffered damages as a result.”

Meridian Eng’g Co. v. United States, 885 F.3d 1351, 1356 (Fed. Cir. 2018) (quoting *Int’l Tech. Corp. v. Winter*, 523 F.3d 1341, 1348–49 (Fed. Cir. 2008)).

First, the contractor must determine whether “a reasonable contractor reviewing the contract documents as a whole would interpret them as making a representation about the site conditions.” *Meridian Eng’g*, 885 F.3d at 1356. Because Plaintiffs contend that groundwater was a differing site condition, they must prove that a reasonable contractor would interpret the contract documents as making representations about water conditions at the site. See *Int’l Tech.*, 523 F.3d at 1349 (“There cannot be a differing site condition ‘unless the contract indicated what that condition would be.’”) (quoting *Control Inc. v. United States*, 294 F.3d 1357, 1363 (Fed. Cir. 2002)). In this case, the Contract included a Final Geotechnical Report that described the subsurface conditions at the Project site as consisting of “Epler Formation limestone [that] forms a subsurface karst terrain that is typical of the soluble carbonate rock response to weathering and erosion.” JX 51 at 5. The Final Geotechnical Report also indicated that voids were encountered in approximately half of the exploratory borings. JX 51 at 6 (“Half of the Phase I 2009 exploration borings, and three of the seven Phase II 2011 borings, showed pitting, voids, or other solution weathering.”). In addition, voids were mentioned in the Final Geotechnical Report, as occurring “as a result of solution weathering” and “pos[ing] a risk of settlement or collapse of foundations if undetected and the foundations are placed upon the void.” JX 51 at 6.

For example, the Final Geotechnical Report stated that,

[w]ith the exception of drill hole B-1, groundwater was not encountered in the borings above the top of rock. . . . *The karstic nature of the regional geology makes it difficult to predict local groundwater conditions.* The occurrence of solution cavities, clay seams, and fractures will impact local groundwater levels and flow behavior. Assuming that a basement will not be constructed, it is not anticipated that groundwater will significantly impact the construction of the project. Zones of perched water may, however, be encountered at shallow depths.

JX 51 at 6–7 (emphasis added).

Likewise, the Drilled Pier Specification provided that bedrock at the Project site was

typically slightly weathered, highly to moderately fractured, and very hard. The bedrock surface is pinnacled and has solution features that are both air filled and filled with clay. These features are common in karst terrain. Open cavities in the bedrock are common. Clay seams were also encountered in the bedrock.

JX 49 at 7.

Because of this physical condition, the Drilled Pier Specification required that protective casings be used by the contractor to “adequately and securely protect [the rock socket] against cave-ins, displacement, and from seepage of groundwater or storm water[.]” JX 49 at 11; *see also* TR 346–47 (Eckert) (“The specification required that the holes be cased to the top of [the] rock socket to prevent any loose material from caving into the hole, along with protecting anybody that had to enter the shaft[.]”).

In addition, the Drilled Pier Specification required that the contractor first must attempt to dewater a drilled pier before seeking approval to complete the pier by using a tremie method, *i.e.*, “in the wet.” JX 49 at 13 (“If water is standing in the bottom of a drilled pier, the water shall be pumped out of the drilled pier to allow inspection of the bottom of the drilled pier by the [CO].”). Only if it was “impossible to dewater” the shaft, could the contractor seek the CO’s approval to complete the hole “in the wet.” JX 49 at 13, 15.

Therefore, the contract documents represented that the subsurface conditions at the Project site were typical of karst geology, that could collapse and cave in, and dewatering could be required to counteract the effects of groundwater. For this reason, the Contract did not affirmatively represent that the site conditions would be completely free from cave-ins or flowing water. JX 51 at 6–7. Although the accompanying Final Geotechnical Report stated that it was not anticipated that groundwater would “significantly impact” excavation, it warned that groundwater conditions can be “difficult to predict.” JX 51 at 7. Therefore, a reasonable contractor could not view the contract documents, as a whole, as making any representation about the presence of subsurface water at the Project site. *See H.B. Mac v. United States*, 153 F.3d 1338, 1347 (Fed. Cir. 1998) (holding that the contract at issue did not provide “an affirmative indication of the subsurface conditions.”).

Second, the court must consider whether the actual site conditions were reasonably foreseeable to the contractor, based on the contract documents and other available information at the time the contract was signed. *See, e.g., Meridian Eng’g*, 885 F.3d at 1357–58 (“A reasonable and prudent contractor would have foreseen the saturated soil condition, based on the contract documents and the fact that the actual conditions at the site indicated such conditions.”).

In this case, prior to bidding on the subcontract, Goettle received the Final Geotechnical Report warning that voids and groundwater could be expected. TR 183 (Pagone) (testifying that Boring B-16 indicated a 17.5-foot void and that Goettle reviewed the information prior to bidding on the subcontract). Walsh’s proposal also anticipated this problem: “[o]nce drilling begins, [Walsh is] prepared to encounter unknowns such as rock and air pockets[,] and have planned our schedule accordingly. We plan to utilize three crawler mounted drill rigs and perform specialized testing and inspections throughout the . . . process.” JX 55 at 31. In addition, the Drilled Pier

Specification provided that the contractor first must attempt to dewater a drilled pier before seeking approval to complete the pier using a tremie method. JX 49 at 13 (“If water is standing in the bottom of a drilled pier, the water shall be pumped out of the drilled pier to allow inspection of the bottom of the drilled pier by the [CO].”). But, if it was “impossible to dewater” the shaft, the contractor could seek the CO’s approval to complete the hole “in the wet,” using a “tremie or pumping technique[.]” JX 49 at 13, 15. Based on these documents, the actual site conditions should have been reasonably foreseeable to Goettle.

The Government’s expert also testified that “[v]oids, or open spaces filled with air, water[,] or other materials, are typical of karst geology, and water seepage is common in these contexts.” DiMaggio Direct at 13. In addition, “variable water conditions are routinely encountered” in karst geology, as are “isolated zones of water.” DiMaggio Direct at 53. And, the “extensive narrative regarding boring B-16” described “variation in rock quality, groundwater, and numerous voids of different size[.]” DiMaggio Direct at 12; *see also* JX 51 at 59–72 (Boring B-16 from pier L-3’s location, taken near each of the “Five Problem Shafts,” indicated the presence of moist clays, dissolutioning, gravel and rock fragments, multiple voids, and the presence of groundwater at thirty-five feet.). Likewise, Plaintiffs’ expert testified that the conditions noted in the boring log for boring B-16 were similar to those encountered during the drilling of the five shafts. TR 934–36 (Brown).³⁵

Goettle’s Operations Manager testified that, once Goettle drilled to the preliminary TORS elevation at pier N-8.4, “there was just a tremendous inflow of water coming into the rock socket from cracks and crevices that were located down in that base of the shaft, in that rock socket portion of the shaft. There were wet conditions above, but the water in the rock socket itself was just pouring in.” TR 381 (Eckert). But, Goettle’s Operations Manager also admitted at trial that “the presence of water wasn’t unexpected, . . . we knew or expected that at that elevation or at some

³⁵ Q. GOVERNMENT COUNSEL: . . . And so would you agree that the conditions at [boring] B-16 looked very much like the problems that were encountered during drilling of these five problem shafts?

A. MR. BROWN: Yes, I would.

TR 934 (Brown).

Mr. Brown further explained:

[T]he prebid boring foretold that there would be some deep rock in this area, and you are going to have to drill through some voids, no question. So, you know, [Walsh] asked me was there a differing site condition here related to the ground conditions. I said no, because, you know, you could tell. . . . So when I called these the problem shafts, I’m not referring to the problems Goettle had getting down to the targeted rock socket. That’s on Goettle. They should have known[.]”

TR 935–36 (Brown).

elevation, that the hole would become wet, but the hole being wet doesn't necessarily give you an indication that it's going to cave." TR 377–78 (Eckert).

The Contract also required that casings must be used to prevent cave-ins or collapse, evidencing that a reasonable contractor should anticipate these events. JX 49 at 11.

Therefore, based on the Contract, boring logs taken at the site, Final Geotechnical Report, and Drilled Pier Specification, a reasonable contractor would have foreseen the possibility of cave-ins, collapse, and flowing water requiring dewatering. *See H.B. Mac*, 153 F.3d at 1346 ("It is well settled that a contractor is charged with knowledge of the conditions that a pre-bid site visit would have revealed.").

Third, the court must determine whether the contractor, in fact, relied on a contract representation. *See Meridian Eng'g*, 885 F.3d at 1356. In this case, the Contract did not make any affirmative representations regarding the "local groundwater conditions." JX 51 at 7.

Fourth, the court must determine whether the plaintiff established that "the conditions differed materially from those represented and . . . the contractor suffered damages as a result." *Meridian Eng'g*, 885 F.3d at 1356. Again, the Final Geotechnical Report and Drilled Pier Specification discussed that the Project site was typical of one consisting of karst limestone. JX 51 at 5; JX 49 at 7. For this reason, the Army Corps made no representation in the contract documents about groundwater conditions. But, Plaintiffs were on notice that they might encounter caving, large voids, and groundwater during excavation. JX 49 at 11; JX 51 at 7. As the parties' experts testified, the actual conditions encountered were consistent with what was represented in the contract documents. DiMaggio Direct at 12–13, 53; TR 935–36 (Brown). It is true that the Plaintiffs' expert testified that the only "condition that Goettle could not have anticipated was that the [Army Corps] would tell them to try to dewater those holes when they were 40 feet below groundwater in fractured limestone and then to try to pump that water out so that someone could go down in the hole to inspect." TR 935 (Brown). But, conduct by the Government is not a physical site condition and, therefore, cannot be the basis for a differing site condition claim. *See Olympus Corp. v. United States*, 98 F.3d 1314, 1316, 1318 (Fed. Cir. 1996) (holding that the differing site conditions clause applies "only to conditions existing at the time of contracting" and "only to 'physical' conditions at the work site"); *see also Fru-Con Constr. Corp. v. United States*, 43 Fed. Cl. 306, 317 (Fed. Cl. 1999) (determining that the differing site conditions clause is "strictly limited to those physical conditions present at the time of contracting").

For these reasons, the court has determined that Plaintiffs failed to establish, by a preponderance of the evidence, all four *Meridian Engineering* elements of a Type I differing site condition. Accordingly, Count III of the February 13, 2017 Amended Complaint must be dismissed.

IV. CONCLUSION.

For these reasons, the court has determined that the Army Corps did not breach the August 17, 2012 Contract by violating the duty of good faith and fair dealing, as alleged in Counts I and II of the February 13, 2017 Amended Complaint. The court also has determined that Walsh did not establish that it encountered a differing site condition at the Defense Logistics Agency Headquarters Site, as alleged in Count III.

The Clerk of Court is directed to enter judgement for the Government.

IT IS SO ORDERED.

s/ Susan G. Braden
SUSAN G. BRADEN
Senior Judge

Court Exhibit A

Witnesses Called by Walsh Construction

(In order of appearance)

Mr. James Naughton was an engineer for Walsh, and served as Project Engineer and then Assistant Project Manager at the DLA Project. TR 16-17. Direct Examination 16-45; Cross Examination 45-70; Redirect Examination 70-72.

Mr. Ralph Pagone was the Vice President of Goettle and Regional Manager for Goettle during the course of the Project. TR 72-73. Direct Examination 72-147; Cross Examination 147-209; Redirect Examination 209-11; Recross Examination 211-12.

Mr. Joseph Dillon was a Senior Superintendent for Walsh during the Project. TR 214-15. Direct Examination 212-46; Cross Examination 246-68.

Mr. Dwight Eckert was Goettle's Operations Manager during the Project. TR 269. Direct Examination 268-277, 334-442; Cross Examination 442-511; Redirect Examination 511; Recross Examination 523-525.

Mr. Steven Vinson was an Assistant Supervisor for Goettle during the Project. TR 525. Direct Examination 525-547; Cross Examination 547-556.

Mr. Jeff Ginter was the Chief Financial Officer for Goettle during the Project. TR 551. Direct Examination 551-598; Cross Examination 589-625, 631-671.

Mr. Dan Brown was an expert witness for Walsh. TR 874. His testimony was filed as an expert report. ECF Nos. 40-1, 40-2. Direct Examination ---; Cross Examination 876-948; Redirect Examination: 948-955.

Mr. Andrew Englehart was an expert witness for Walsh. TR 955. His testimony was filed as an expert report. ECF No. 29. Direct Examination 955-956; Cross Examination 956-991; Redirect 991-999.

Witnesses Called by the Government

(In order of appearance)

Mr. David Tucker was an Army Corps Geotechnical Engineer on the Project. TR 671. Direct Examination 671-717; Cross Examination 717-747.

Ms. Megan Garrett was the Government's Geologist on the Project and Program Manager for the Army Corps. TR 747. Direct Examination 747-787; Cross Examination 787-831.

Mr. Cyprian Fonge was a Quality Assurance Inspector for the Army Corps on the Project. TR 831. Direct Examination 831-839; Cross Examination 839-876.

Mr. DiMaggio was an expert witness for the Government. TR 999. His testimony was filed as an expert report. ECF Nos. 42-1, 42-2. Direct Examination 999-1000; Cross Examination 1000-1037; Redirect Examination 1037-1041.

Mr. Doug Keller, called as a hostile witness, was the President and Chief Executive Officer of Goettle. TR 1041-42. Direct Examination 1041-1103; Cross Examination 1103-1106.

Mr. Martin Homan was a Supervisory Auditor for the Defense Contract Audit Agency. TR 106. He was involved in the audit of Goettle's claim submitted for the Project. TR 1111. Direct Examination 1106-1117; Cross Examination 1117-1136.